

# 2025 Crop, Livestock, & Youth Demonstrations & Programs



## Greene County Cooperative Extension Service

Lance Blythe  
CEA - Staff Chair

Dave Freeze  
CEA - Agriculture

Kristie Head  
4-H Agent

Sherry Filadelfia  
Admin Specialist



# 2025 Crop & Livestock, & Youth Programs & Demonstrations

## Table of Contents

---

Arkansas Diamond Annuals Trial	1
Okra Cultivar Trial	11
Arkansas Rice Performance Trials (ARPT)	14
Soybean Disease Control Demonstration - Klingonsmith	19
Soybean Disease Control Demonstration - Little Covington	23
Corn Hybrid Variety Demonstration	27
2025 Hay Contest	30
2025 Rezilon Study	32
2025 High Tunnel Survey	38
2025 Greene County Master Gardener Officers	46
2025 Greene County Master Gardener Awards	48
Expanded Food & Nutrition Education Program	51
4-H Top Notch Intercollegiate Swine Judging Contest	53
4-H O’Ramas	56
4-H Service Learning	58
4-H Project Groups	59
Greene County Soil Test Trends	69
Greene County Annual Update	70
Greene County Extension Partners	72



## *Arkansas Diamond (AD) Trials – Greene County 2025*

<b><u>Investigator:</u></b>	Dr. Anthony Bowden	<b>Site Manager:</b>	Kristie Glass
<b><u>Partners:</u></b>	-Arkansas Diamond Team -Greene County Master Gardeners	-Arkansas Green Industry Association -Greene County Fair (Dennis Hammon)	
<b><u>Location:</u></b>	Paragould – Greene Co Fairgrounds	<b><u>Soil Series:</u></b>	Loring silt loam
<b><u>Objectives:</u></b>	Note:		

- Monitor summer annuals at several Arkansas sites to evaluate their adaptability, growth rate & size, flower and foliage show, & potential pest issues.
- Spotlight plant cultivars that have consistently performed well in most Arkansas landscapes.
- Support local Master Gardeners in beautification project efforts.

### **Annuals Evaluated:**

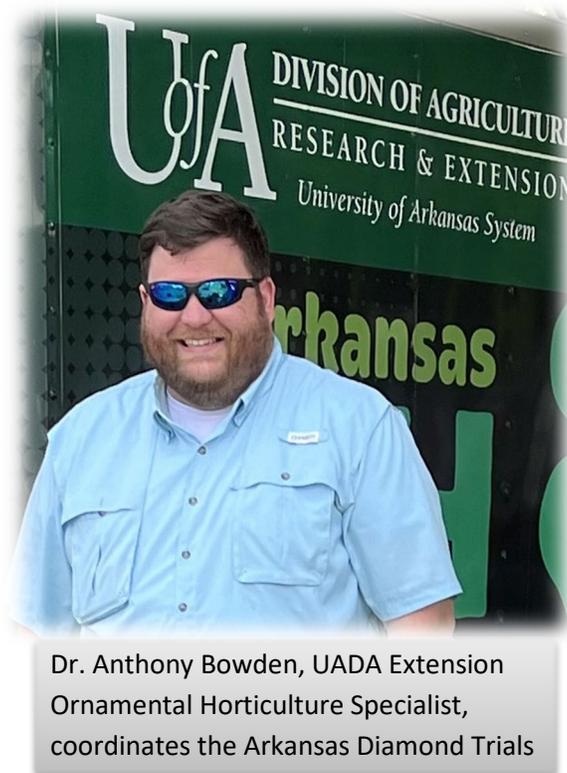
Sunpatiens “Solarscape Salmon Glow”  
French Marigold “Bonanza Flame”  
Ornamental Pepper “Quick Fire”  
Tomato “Pink Delicious”

### **Project Procedures & Set Up:**

Trial plants were picked up from Dr. Anthony Bowden, U of A, Division of Agriculture (UADA), Ornamental Horticulture Specialist, at the State Extension Office, on May 8th. The Greene County Trial was planted May 22nd.

Trial plants were evenly placed in raised beds. The Sunpatiens and Marigolds shared one bed (9 plants per entry), while the Pepper (5 plants) and Tomato (1 plant) entries shared an adjacent bed. Each trial entry was allotted a 4’x 4’ area. As such, the Sunpatien and Marigold plants each had about 2 square feet of growing area, while the Peppers saw about 3 square feet per plant, and the Tomato received a full 16 square feet.

The test site (Youth Teaching Garden) (YTG) at the Greene County Fairgrounds was one of the Greene County Master Gardeners (GCMG) sanctioned projects. The site received full sun and had good drainage. The silt loam soil was also in good condition from recent years of receiving compost and organic mulching.



Dr. Anthony Bowden, UADA Extension Ornamental Horticulture Specialist, coordinates the Arkansas Diamond Trials

**Fertility:**

Osmocote (18-6-12) was incorporated into the soil around each plant (1 Tbs/ 2 square foot) at planting time. The slow-release fertilizer sustained the plants all season long, with good foliage color and flowering observed through September.

**Irrigation:**

The GCMG YTG chair and AD trial project leader worked together to water trial plants through the growing season. A couple of times the trial plants did suffer when hot, dry weather set in from August through September. Note that because of unexpected vandalism, it was sometimes a challenge for GCMG volunteers to get to the trial plants to water them, due to the fairgrounds being frequently locked up to deter vandals.

A nice layer of pine bark mulch was also used on trial plants and helped to stabilize soil moisture and temperature in the project beds.



Kristie Glass, Greene Co AD site manager, water trial plants after being planted on May 22<sup>nd</sup>.

**Weed Control:**

The beds were freshly tilled and weed free at planting time. They were regularly hand weeded by the site project manager and GCMG volunteers. The mulch put out at planting also helped a lot to keep weeds from emerging.

**Insect & Disease Observations:**

We did not observe any significant pest problems at this trial site. Some light insect feeding was recorded for the Sunpatiens entry, but not enough to affect flower show. We did also see some fruitworm feeding on the tomato entry later in the season.

None of the trial entries had any disease issues. In addition, no pesticide applications were made at this test site this year.

### **Results:**

We want to acknowledge and thank our GCMG AD chair (Kristie Glass) who collected plant data monthly for this trial.

Data collected include:

- Plant size (height & width)

-Percent flower rating- 1 = 0% 2 = 1% to 25%, 3 = 26% to 50%, 4 = 51% to 75 5 = 76% to 100%).

-Plant health rating - (Rated 1 to 5 based on growth & color 1=Poor 3=Average 5=Excellent)

-For the tomato entry, some harvest data was also recorded, along with plant health and pest ratings.



Kristie Glass, GCMG volunteer, measures plant heights at the Greene Co AD trial site.

### **Following is a brief summary for each trial entry.**

#### **Sunpatiens “Solarscape Salmon Glow”**

Solarscape Salmon Glow did just that for a few weeks but grew dim as summer stress came on! This Sunpatiens entry immediately took off growing when transplanted in late May! It did great, with a constant flower show until late July when hot, dry weather came to stay! Their average flower rating for the season was 3.5.

At planting, they were 5 inches tall, and by August, 4 times that, at 20 inches! The average beginning and ending width recorded was 5 and 22 inches, respectively.

Plant health for our Glow entry was good at first but quickly started to slip in August as the plants baked in the heat! By September, five of the nine plants for this entry had succumbed to the scorching heat! The mean health rating (4.2) for the season, however, ended up as average (good). On another note, no significant insect or disease problems were seen.

Talk about a sparkle to the eye! The glossy green foliage coupled with an abundance of soft pink flowers made Glow a garden beauty! If you want a shiny annual, with abundant flowering throughout the season, Salmon Glow might be one to use to light up your garden! As a precaution, make sure to not get behind on watering when it begins to get hot.



### **French Marigold “Bonanza Flame”**

We saw beautiful orange blooms from the Bonanza Flame marigolds for almost the entire season! They had an average flower rating of 3.8, higher than our other 2 ornamental entries in the trial. They also had the most consistent flower show this year, finishing strong even in the last few weeks of the season when temperatures soared!



At planting, the Bonanzas measured 4 inches tall and wide. By the end of summer, they had grown a foot tall, and a foot and half wide. The average height and width for the season was 8 and 12 inches, respectively.

The Flame entry maintained good health most of the season. They did show some branch dying and foliage browning in August & September when the heat, coupled with insufficient irrigation, caused them to begin to dry up some. The average health rating for Bonanza Flame ended up good at 4.2. Considering pests, none caused any significant problems at this site for this entry.

We thought the Bonanza Flames fired up our garden! They had an abundance of bright orange flowers that consistently radiated like the sun, from planting until summer’s end! In addition, when considering the sun’s extreme radiance this year, the flame did not go out for our Bonanza entry, as they held on to the end!

### **Ornamental Pepper “Quick Fire”**

What better to heat up your flower garden than a little pepper! We did just that this year with our ornamental pepper entry, Quick Fire! It provided an early season showing of cute, tiny, white, bell-type flowers! It did end up with the lowest season average flower rating (2.7), but what it lacked in flower show was made up with its heavy load of fire engine red fruit, adorning the glossy green plants, the later half of the season!



The Fires were small at planting, just a couple inches tall and three inches wide. They consistently grew all season reaching a final height and width of 11 and 18 inches, respectively. They were the smallest entry in the trial, averaging 7 inches tall, and 11 inches wide for the season. One drawback seen with our pepper entry was their inconsistent height from one plant to the next, compared to consistent plant size seen for our other trial entries.

The hot peppers held up much better than the other 2 ornamental entries when we got toward the end of summer! They seemed to thrive in the heat and dry weather, maintaining vibrant color and growth throughout the heat wave! They scored an average health rating of 4.8 for the season, remaining attractive even as the other flower entries were failing and looking rough during the drought. Their season long clean bill of health was also coupled with no insect or disease issues!

If you are looking for a tough plant to handle hot conditions, and be more likely to survive when water runs short, you should give ornamental peppers a try! They could really brighten up your landscape from mid to late season with a sea of fruit that start out green, then slowly turn orange, and finally bright red! Think about setting “Fire” in your flower beds and you just might be the HOTTEST gardener in town!

### **Tomato “Pink Delicious”**

In recent years, there has been an increase in the interest of some gardeners in growing plants in their landscapes that could also be used for food (foodscaping). Knowing this, AD plant professionals chose to include a tomato in the AD trial this year.

“Pink Delicious” was the tomato cultivar used. It was suggested by Neal Adams, business owner of Adams Nursery in Greene County, as a popular and productive variety. It is an indeterminate selection that produces large, pink fruit.

Our tomato plant was 8 inches tall when planted in late May. By September it had climbed well above and out of our 6-foot cage to reach a height of 8 feet! During one late season storm the wind laid the plant over, but we were able to prop it back up, and it continued to thrive!

Notes show our tomato grew wonderfully from start to finish! It remained green and healthy all year,



responding nicely to our pre-plant osmocote application, and rich landscape beds. The only pest issue recorded was some fruitworm feeding later in the season.

Considering productivity, our “Pink” entry was a winner! Although we were unable to regularly record harvest information due to limited access to the trial site, overall, we seen excellent production of large, pink tomatoes! Production began early with our first tomatoes being harvested on June 27<sup>th</sup>, just a little over a month after transplanting!

By the end of July our tomato plant was producing heavily and continued to do so until the first frost (end of October), except for a small down turn in production when irrigation was delayed, during the late season drought. Before the first frost, our YTG students were able to harvest over a 5-gallon bucket full of tomatoes from the plant!

“Pink Delicious” is a variety everyone should think about putting in their garden or landscape bed. In this trial it proved to be healthy and productive! They can also provide a rich green color for your flower bed, with some pink mixed in, as fruit matures, and are ultimately enjoyed in the kitchen!

### **Summary & Time** **Lapse Photos:**

The summer annuals trial was a very beneficial project!

-It provided beautification to the local fairgrounds which receives regular public use.

-It helped promote the GCMG program.

-It generated valuable information for the trial entries that participating companies and groups can use to help with future retail and landscape efforts.



**May 23rd Trial Pictures - Day after Planting**



**June 23rd Trial Pictures – Plants 1 month after planting**



**July 28<sup>th</sup> Trial Pictures – Plants 2 months after planting**



**August 28<sup>th</sup> Trial Pictures – Plants 3 months after planting**



**September 18<sup>th</sup> Trial Pictures – Plants 4 months from planting**



**October 14<sup>th</sup> Trial Pictures – Plants 5 months from planting**



University of Arkansas System, Division of Agriculture  
 Greene County Coopeative Extension Service, Master Gardener Program  
 2025 Arkansas Diamonds - Summer Annuals Research Trial



Site:	Greene County Fairgrounds	Partnering:	Greene County Fair (Dennis Hammon)
Investigators:	Anthony Bowden	Master Gardener Managers:	Kristie Glass
Planting Date:	May 22nd	Master Gardener Recorders:	Kristie Glass

Plant Entry & Rating Dates - ( monthly goal)	Height Inches	Width Inches	Flower Rating*	Health Rating**	Insect Issues	Disease Issues	Other observations
--	---------------	--------------	----------------	-----------------	---------------	----------------	--------------------

<b>Sunpatiens "Solarscape Salmon Glow"</b>							
May 22nd	5	5	3	5	None	None	Plants look good at planting
June 5th	5	8	2	4	None	None	Many fallen flowers, lots of new flower buds
June 27th	9	14	4	4	Light chewing	None	Irrigated today
July 10th	12	18	5	5	Light chewing	None	NA
August 12th	20	20	5	4	NA	NA	NA
Sept 7th	21	22	2	3	NA	NA	Drought has taken out 5 of the 9 plants
Season Average	12.0	14.5	3.5	4.2			

<b>French Marigold "Bonaaza Flame"</b>							
May 22nd	4	4	5	5	None	None	Plants look good at planting
June 5th	4	5	2	3	None	None	Many fallen flowers, lots of new flower buds
June 27th	7	11	5	5	None	None	Touch of yellowing on lower leaves
July 10th	10	16	3	5	Light leaf hopper	None	NA
August 12th	12	18	4	4	NA	NA	NA
Sept 7th	12	19	4	3	NA	NA	Drought weakening plants
Season Average	8.2	12.2	3.8	4.2			

<b>Oranamental Pepper "Quick Fire"</b>							
May 22nd	2	3	1	5	None	None	Plants look good at planting
June 5th	4	3	1	4	None	None	Two plants lots to birds
June 27th	6	10	2	5	None	None	Irrigated today
July 10th	8	13	3	5	None	None	NA
August 12th	10	17	4	5	None	None	NA
Sept 7th	11	18	5	5	None	None	Height not consistant among plants
Season Average	6.8	10.7	2.7	4.8			

\*Flower Rating - Estimate percent flowering - 1 = 0%, 2 = 1% to 25%, 3 = 26% to 50%, 4 = 51% to 75, 5 = 76% to 100%  
 \*\*Plant Health Rating - Use a scale of 1 to 5 based on health of foliage, and plant growth - 1=Poor, 3=Average, 5=Excellent

## *2025 Okra Cultivar Trial – Greene County*

**Investigators:** Dr. Aaron Cato, Dr. Ryan Keiffer

**Partnering:** Greene County Fair Association  
Youth Teaching Garden Program Participants  
Greene County Master Gardeners

**Objectives:**

Evaluate okra cultivar performance, yield potential, and fruit taste attributes. Monitor variety pest tolerance.

**Site:**

The okra demonstration was established at the Greene County Fairgrounds, Youth Teaching Garden (YTG). The soil series at the site was a Loring silt loam.

A second test location was planned, but was also abandoned due to a demanding workload of the volunteers who were to oversee that test site.

**Production System:**

Conventional tillage was used. A small tiller was used to lightly (2 inches deep) work the soil a few days before planting. The previous crop was ornamental corn.

Seed provided by the UADA Horticulture Specialist were seeded in 6 packs and started under grow lights a few days before planting at the test site.



**Planting Day:**

The okra seedlings were transplanted at the YTG on May 30<sup>th</sup>. For each variety in the trial, we planted 3 seedlings, 15 inches apart, in one row that went the length of the small garden spot.

The trial included 4 cultivars. Jambalaya, Carmine Splendor, Jade, and Clemson Spineless, were planted in that order from east to west.



**Fertilizer:**

Regarding fertilizer, 39 units of NPK (source:13-13-13) was incorporated into the soil when the seedbed was prepared on May 23rd. This was followed by 12-12-12 applied four times via fertigation about every two weeks from planting through August. The total units of NPK used for season was 90-90-90.

**Irrigation:**

Drip irrigation was used 12 times to water the trial from planting through early August. During hot, dry periods we needed to irrigate every 3-4 days to prevent the test plants from wilting. A few weeks into the trial we suspected the root system was being limited from taking water up deeper in the soil.

**Weed Control:**

The seedbed was clean at planting from tilling. Weeds were hoed or hand pulled during the rest of the trial, each time the garden was irrigated.

**Insect Control:**

A building population of aphids was found on the test plants in early July. Bifenthrin was applied for control and did a good job.

**Disease Control:**

None seen.

**Production Notes – Flowering & Harvest & Fruit Quality:**

Seed planted indoors under grow lights took 6 days to emerge for each cultivar in the trial.

From transplanting at the test site to first flower was 33 days for both Clemson spineless and Carmine Splendor. It took our other 2 cultivars, Jade and Jambalaya, 35 days to reach first flower.

First harvest followed less than a week after flowering for each trial entry. We picked the first okra from Clemson and Carmine on July 7<sup>th</sup> (37 days after planting). The first harvest for Jade and Jambalaya was on July 10<sup>th</sup> (40 days after planting).



Okra from the trial plants was harvested twice per week and stored in the freezer until the test was abandoned. It was decided not to report yield data since there was so much variation in plant size and performance from one plant to the next due to the hardpan discovered at the site.

We also chose not to report pod length for each variety since plant size, and subsequently fruit size, varied so much at the trial location.

We had planned an okra taste test for YTG students, but was unable to complete this task due to a large agenda the night of the planned taste testing, which caused the taste test to be dropped.

### **Summary & Results:**

The demonstration was abandoned on August 12<sup>th</sup>.

We used a soil probe to check for a hardpan in the soil. We could only get the probe in the ground from 2 to 4 inches. A hardpan was confirmed when we pulled up the test plants and inspected their roots. A couple of inches under the soil surface they had all turned sideways and began to curl since they could not grow downward.

The hardpan had restricted plant root development along with nutrient & water uptake. The end result was stunted plants with production very limited and varied from one end of the row to the other. The plants in the center of the row seemed more affected by the hardpan.



## 2025 Arkansas Rice Performance Trials (ARPT)

- Partnering:** Pigue Farm (Ron, Clint, Eric, Ashton, David)    **Investigator:** Dr. Jarrod Hardke
- Crop Advisor:** Brandon Davis    **Program Associates:** Donna Frizzell, Hannah Garrison
- Location:** Paragould (Greene County)    **Soil Series:** Jackport silty clay loam
- Objective:** Evaluate rice hybrids/varieties entered in the UADA Performance Trials, under farm level management. Determine local yield potential and pest (disease & insect) reaction of commercially available hybrids/varieties.

### **Tillage and Planting:**

Soybeans were planted on the test field (generally 0 grade) in 2024. Conventional tillage (no levees) was used to prepare the field in 2025. The ARPT small plots were planted April 18th. Flood irrigation was used.

### **Demo Setup & Weather:**

The test included 29 Cultivars (8 drill rows of each), replicated 4 times. All the plots, except a few in a low spot in the NW corner of the test that had standing water, came up to a good DD50 stand April 29<sup>th</sup>. The test was harvested with a small plot combine on September 3<sup>rd</sup>. The farmer's field was planted to DG 263L.

### **Fertility:**

A custom application of preplant P & K fertilizer (0-40-90) was used. Preflood N included 250 #s of urea (115 units N) and 50#s ammonium sulfate (10-0-0-12). A final mid-season application included 100 # of urea (46 units). A total of 171 units of N was applied to the test plot field.

### **Pest Control:**

For weed control, Command (16 oz) plus glyphosate was applied before planting. It was followed by an overlapping residual application of Prowl (2.1 pt) plus Clincher (40 oz). A final preflood herbicide application included Rinde (36 oz) plus Permit (1 oz), to help with barnyardgrass and yellow nutsedge. Overall, weed control was excellent.

No significant disease problems were seen. A fungicide (Amistar Top) application was made for protection from smuts. Regarding insects, stink bug numbers were very low this year, so no insecticide was used.



Pigue Farms 2025 Greene County ARPT Plots.



ARPT plots in Greene County pre-flood.

**Results:**

At this ARPT site, the average yield of all entries was 171 bushels per acre (bpa).

RiceTec had the highest yielding long grain hybrid entry at the Pigue location. RT7302 made 205 bpa. It was followed closely by RTXP753 (201 bpa), RT7431MA (198 bpa), and RT7331MA (196 bpa). Then came RT7421FP with 191 bpa.

RTv7231MA (184 bpa) was the top yielding pure line entry, followed not far by DG263L (180 bpa), ProGold L4 (170 bpa), and Ozark (167 bpa).

Looking at the medium grain entries, RiceTec RT 3202 (193 bpa), and Taurus (176 bpa) were the top yielding cultivars. Review the tables that follow for more planting, yield, & milling results, for all entries in this trial and at other locations.

Dr. Jarrod Hardke provides cultivar updates at field day in August at Pigue Farm test plots.



Greene County ARPT plots a couple of weeks post flood in June.

Ron Pigue (right) visits about crop harvest with UADA Rice Program Technicians.



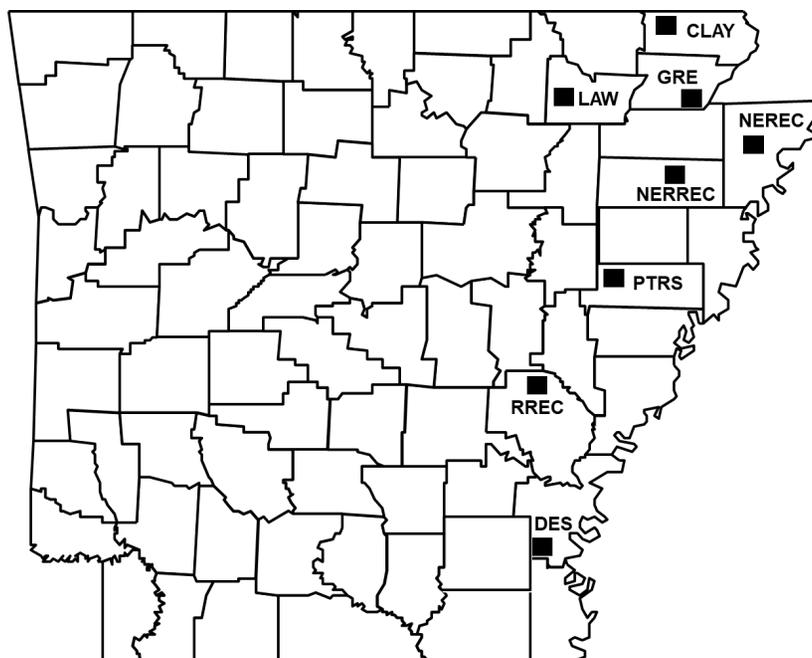
ARPT plots in Greene County in early September just before harvest.

# Arkansas Rice Performance Trials (ARPT)

## Summary of Arkansas Rice Performance Trial Locations, 2025

University of Arkansas System Division of Agriculture

Site	Planting Date	Emergence Date	Harvest Date	Soil Type	Location Type
RREC, Arkansas Co., Stuttgart, Ark.	March 27	April 6	September 5	Dewitt silt loam	Research Station
PTRS, St. Francis Co., Colt, Ark.	April 14	April 23	September 15	Calhoun-Henry silt loam	Research Station
NEREC, Mississippi Co., Keiser, Ark.	April 16	April 23	September 10	Sharkey silty clay	Research Station
NERREC, Poinsett Co., Harrisburg, Ark.	May 23	May 30	September 30	Henry silt loam	Research Station
CLAY, Clay Co., McDougal, Ark.	April 1	April 21	September 2	Jackport silty clay	On-Farm
DESHA, Desha Co., McGehee, Ark.	March 26	April 8	August 21	Sharkey & Desha clay	On-Farm
LAW, Lawrence Co., Walnut Ridge, Ark.	May 14	May 20	September 17	Foley-Calhoun silt loam	On-Farm
GRE, Greene Co., Paragould, Ark.	April 18	April 29	September 3	Jackport silty clay loam	On-Farm



# Arkansas Rice Performance Trials (ARPT)

## 2025 Grain Yield Summary – All Locations

University of Arkansas System Division of Agriculture

Cultivar	Grain Length <sup>1</sup>	RREC bu/ac	PTRS bu/ac	NEREC bu/ac	NERREC bu/ac	CLAY bu/ac	DESHA bu/ac	GRE bu/ac	LAW bu/ac	Mean bu/ac
Ozark	L	175	172	166	176	160	210	167	162	<b>173</b>
ProGold L4	L	184	170	176	159	173	200	170	170	<b>175</b>
DG263L	L	152	150 <sup>13</sup>	161 <sup>60</sup>	179	187	210	180	173	<b>174</b>
DG273L	L	177	170	178	162	174	197	168	162	<b>173</b>
RTv7303	L	148 <sup>13</sup>	159	125	166	179	205	153 <sup>33</sup>	168 <sup>63</sup>	<b>163</b>
CLL16	L	146	163	155	160	162	205	168	153	<b>164</b>
CLL18	L	163	162	173	177	160	204	162	177	<b>172</b>
CLL19	L	159	147	143	133	138	200	137	164	<b>153</b>
CLHA03	L	161	150	154	153	167	191	146	163	<b>161</b>
PVL04	L	138	140	159	143	148	191	152	160	<b>154</b>
PVL05	L	168	143	144	162	130	204	123	142	<b>152</b>
PVL06	L	158 <sup>23</sup>	175	189 <sup>15</sup>	179	184	207	179	166	<b>180</b>
DG543PVL	L	133 <sup>13</sup>	141	143	73	164	180	129	148	<b>139</b>
DG563PVL	L	137 <sup>33</sup>	161	156	160	194	201	165	154	<b>166</b>
RTv7231MA	L	170	175	188	166	178	193	184	179	<b>179</b>
RT7331MA	L	171 <sup>18</sup>	178 <sup>17</sup>	167	179	212	214	196 <sup>8</sup>	172 <sup>35</sup>	<b>186</b>
RT7431MA	L	141 <sup>38</sup>	198	168 <sup>53</sup>	184	221	204	198	167	<b>185</b>
RT7221FP	L	187	201 <sup>30</sup>	195 <sup>23</sup>	164	187	203	174	182	<b>186</b>
RT7321FP	L	171	157	182	175	207	203	181	157 <sup>68</sup>	<b>179</b>
RT7421FP	L	158 <sup>23</sup>	178	210	166	201	207	191	179	<b>186</b>
RT7521FP	L	180 <sup>13</sup>	185	196	170	211	230	182	176 <sup>43</sup>	<b>191</b>
RT7301	L	159	166	175	156	183	209	185	168	<b>175</b>
RT7302	L	141 <sup>68</sup>	179 <sup>8</sup>	181 <sup>43</sup>	196	220	229	205	192 <sup>43</sup>	<b>193</b>
RTXP753	L	178 <sup>15</sup>	180	192	188	208	221	201	185 <sup>13</sup>	<b>194</b>
Titan	M	124	152	159	137	185	175	168	137	<b>155</b>
Taurus	M	174	177	190	157	169	195	176	178	<b>177</b>
ProGold M3	M	159	165	173	147	192	184	163	150	<b>167</b>
RT3202	M	173	185	200	160	234	150	193	178 <sup>15</sup>	<b>184</b>
CLM05	M	160	155	162	140	180	200	162	152	<b>164</b>
<b>Mean</b>	--	<b>160</b>	<b>167</b>	<b>171</b>	<b>161</b>	<b>183</b>	<b>201</b>	<b>171</b>	<b>166</b>	<b>172</b>

<sup>1</sup> Grain Length: L=long grain, M=medium grain.

\* Numbers in superscript beside yields represent percent lodging.

**NOTES: RREC impacted by delayed harvest.**



# Arkansas Rice Performance Trials (ARPT)

## 2025 Milling Yield Summary – All Locations

University of Arkansas System Division of Agriculture

Cultivar	Grain Length <sup>1</sup>	RREC HR-TR <sup>2</sup>	PTRS HR-TR	NEREC HR-TR	NERREC HR-TR	CLAY HR-TR	DESHA HR-TR	GRE HR-TR	LAW HR-TR	Mean HR-TR
Ozark	L	41-69	51-67	59-70	62-69	60-69	42-68	63-70	60-70	55-69
ProGold L4	L	46-69	52-67	59-69	55-64	61-68	46-69	65-70	62-69	56-68
DG263L	L	48-68	46-65	55-67	53-62	62-68	55-68	64-69	56-67	55-67
DG273L	L	47-67	47-64	57-67	58-66	56-66	50-68	63-68	55-66	54-67
RTv7303	L	49-67	49-65	57-67	60-66	50-65	46-68	62-69	53-66	53-67
CLL16	L	38-68	43-65	59-69	59-68	56-67	40-68	63-70	58-69	52-68
CLL18	L	38-68	47-64	57-68	60-68	53-65	41-67	64-70	58-68	52-67
CLL19	L	46-69	50-66	58-68	56-65	58-67	44-67	66-70	58-67	54-67
CLHA03	L	55-68	52-65	60-68	59-67	62-68	51-68	66-70	63-68	58-68
PVL04	L	55-68	54-66	59-69	56-66	59-68	48-67	64-71	58-68	56-68
PVL05	L	41-68	47-66	48-67	57-67	50-67	42-69	59-71	56-68	50-68
PVL06	L	39-65	50-66	57-68	57-65	58-67	36-66	62-69	58-68	52-67
DG543PVL	L	51-69	50-67	58-68	54-64	60-67	53-69	65-70	52-68	55-68
DG563PVL	L	52-69	48-66	60-68	56-64	60-67	58-69	65-70	58-67	57-67
RTv7231MA	L	34-68	34-68	51-69	59-67	56-66	48-68	55-70	51-69	48-68
RT7331MA	L	45-70	42-68	57-70	60-68	53-70	52-70	59-72	56-70	53-70
RT7431MA	L	37-69	38-67	57-70	59-67	59-70	50-70	61-72	59-69	53-69
RT7221FP	L	39-69	34-66	49-69	54-66	47-69	46-69	54-71	44-68	46-68
RT7321FP	L	40-69	30-68	50-69	57-67	49-69	41-69	57-71	42-69	46-69
RT7421FP	L	37-69	36-66	58-70	57-66	57-69	44-69	62-70	54-68	50-69
RT7521FP	L	46-69	47-64	59-69	58-66	58-69	48-69	63-71	51-67	54-68
RT7301	L	41-70	27-67	54-71	57-66	41-69	44-69	58-71	50-70	46-69
RT7302	L	36-70	36-67	55-71	59-67	51-70	44-70	62-72	56-70	50-69
RTXP753	L	39-71	31-68	55-71	61-69	43-69	48-71	57-71	50-69	48-67
Titan	M	32-69	35-68	54-69	59-67	57-68	52-69	61-71	58-69	51-69
Taurus	M	35-71	34-68	58-70	58-67	57-68	52-70	61-72	59-70	52-69
ProGold M3	M	52-70	50-66	66-69	58-65	62-68	61-69	68-70	62-68	60-68
RT3202	M	40-70	32-66	53-69	52-64	57-69	39-69	63-71	48-69	48-68
CLM05	M	44-69	42-64	61-66	54-62	60-67	58-68	65-69	55-66	55-66
<b>Mean</b>	--	<b>43-69</b>	<b>43-66</b>	<b>57-68</b>	<b>57-66</b>	<b>55-68</b>	<b>48-69</b>	<b>62-70</b>	<b>55-68</b>	<b>52-68</b>

<sup>1</sup> Grain Length: L=long grain, M=medium grain; <sup>2</sup> HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

## 2025 Soybean Disease Control Demonstration - #1 (Klingonsmith West)

**Volunteer:** Eason (Carlos, Shane, Travis) Farm      **Consultant:** Mike Simmons

**Partnering:** BASF (Andrea Althoff, Kim Mayberry)

**Location:** Greene County – Lorado, AR      **Soil Series:** McCrory fine sandy loam

**Objective:** Evaluate soybean disease control and yield response to use of foliar fungicide.

### **Production System:**

Conventional tillage was followed on the test field (Klingonsmith West), which was in row rice in 2024. A bedder roller was used to prepare 60-inch beds. Soybeans (Becks 4661 XF) were planted April 22nd, using a 30-inch row spacing. The field had a good plant stand across the test area.

### **Demonstration Set Up & Procedures:**

The demonstration field was marked off using bicycle flags. The treatments in the test included an untreated check (red flags) and a fungicide (Revytek) treatment (yellow flags). These treatments alternated every 36 rows (90 feet) across the field, resulting in 6 replications (paired comparisons). The test was not randomized.

The Revytek treatment (8 oz/acre) went out July 28<sup>th</sup> using a John Deere spray rig (90-foot swath). An application rate of 20 gallons per acre (gpa) was used to ensure good coverage and canopy penetration. An adjuvant (Petrichor at 4 oz/acre) was also included to improve spray coverage. Note that Revytek contains three active ingredients (fluxapyroxad, pyraclostrobin, and mefentrifluconazole), all from different groups of fungicide chemistry (groups 7, 11, & 3).

Mike Simmons, local Crop Consultant, made weekly pre-spray and post spray field observations to check for the presence of foliar disease, and to assess the level of disease pressure.

Andrea Althoff, BASF Regional Field Agronomist, took test field pictures using a drone a few weeks after fungicide treatment, to compare the crop for differences in plant health & maturity between untreated and treated strips.

Soybean Fungicide Demo Team: From left, Mike Simmons, Kim Mayberry, Andrea Althoff, and Carlos Eason



Yields were determined for each treatment using the farmer's combine yield monitor. Yield maps were also generated with John Deere mapping software. An officially calibrated local grain elevator machine was used to determine test weights.

### **Results & Discussion:**

#### **Disease Pressure**

On July 15 light levels of target spot (TS) were found low in the canopy when the soybeans were at GS (growth stage) R3 (early pod). Frogeye leaf spot (FLS) was also found at trace levels in the upper canopy. It was decided to set up a fungicide test to determine crop response to using a fungicide application, whether disease continued to develop, or it remained light.

The soybeans had developed to GS R4 (late pod) by July 28<sup>th</sup> when the Revytek treatment went out. By this time, FLS seemed to have halted in development, likely due to the recent hot, dry weather. Meanwhile, TS was still low in the canopy and slowly developing, likely due to the high humidity from a dense crop canopy and furrow irrigation.

By August 6<sup>th</sup>, 10 days after our fungicide treatment was made, the soybeans were at R5 (early seed), and FLS was still at just trace levels in both treated and untreated plots. TS however, continued to develop and had climbed to mid canopy for both treated and untreated plots.

By August 20<sup>th</sup>, 25 days after fungicide application, FLS was still at trace levels throughout the field. On the other hand, TS was beginning to show more pressure and climb higher in the canopy in the untreated strips compared to those with fungicide protection.

When we fast forward to September 17<sup>th</sup>, visual differences in the strips were readily apparent even at ground level. Drone pictures provided a spectacular view of the differences in the field strips receiving a fungicide application versus those not getting one.



## Yield

The test field was harvested on October 2nd. The adjusted yields recorded are shown in table 1.

Averaged across reps, the plots receiving fungicide treatment made 72.1 bushels per acre (bpa) while the untreated plots cut 68.2 bushels.

Yield maps created by the JD mapping program also provide a vague digital view of the yield differences between treated and untreated strips.



Picture of harvest by Mike Simmons, Crop Consultant in Greene County

**Table 1: 2025 Soybean Fungicide (Revytek - 8 oz/A) Test**

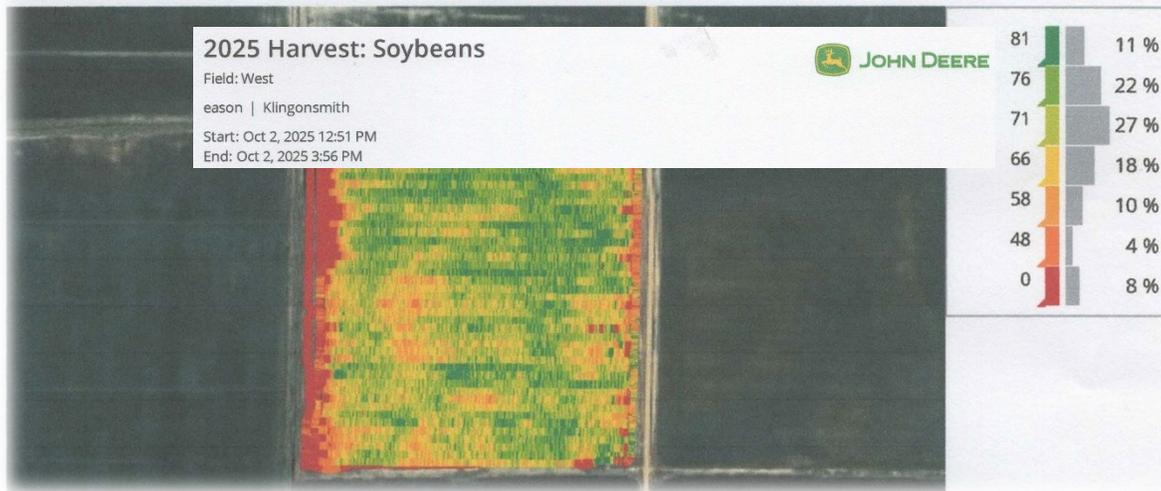
**Eason Farm - Lorado, Arkansas      Trap field - Harvested October 2nd**

Plot #	Test	Plot Width	Plot Length	Plot Area	Combine Monitor Load	Combine Monitor Wet Pounds	Combine Monitor Percent H2O	Plot Pounds Adjusted H2O 13%	Adjusted Yield Bushels Per Acre	Test Weight Pounds/Bushel
N to S	Treatment	Feet	Feet	Acres	Number					
2	U	30	1199	0.83	3	3263	13	3263	65.9	
3	T	30	1192	0.82	4	3532	12.8	3540	71.9	56.3
4	U	30	1193	0.82	5	3349	12.6	3364	68.2	55.7
5	T	30	1190	0.82	6	3527	12.7	3539	72.0	
6	U	30	1190	0.82	7	3358	12.6	3373	68.6	
7	T	30	1190	0.82	8	3521	12.5	3541	72.0	
8	U	30	1190	0.82	9	3365	12.5	3384	68.8	
9	T	30	1190	0.82	10	3435	12.5	3455	70.3	
10	U	30	1190	0.82	11	3380	12.5	3399	69.1	
11	T	30	1190	0.82	12	3601	12.3	3630	73.8	56
12	U	30	1190	0.82	13	3361	12.6	3376	68.7	55.1
13	T	30	1190	0.82	14	3561	12.4	3586	72.9	
Fld Ave>								3454	70.2	
Trt Ave>								3548	72.1	56.2
Un Trt Ave>								3360	68.2	55.4

## Test Weight

Test weights were also slightly higher on the fungicide plots, on samples evaluated from rep 1 and rep 6. The strips getting fungicide showed an average test weight of 56.2 while the untreated strips had a 55.4 average.

## Map: Yield



## Economics

Was the fungicide application economically beneficial in this demonstration? Yes. Total expense included the cost of a ground application and the fungicide (Revytek – 8 oz). The application and product (2026 UADA budget) were estimated at \$7 and \$23 per acre, respectively, for a total of \$30/acre.

The fungicide application resulted in almost a 4 bushel increase per acre, which computes to around \$42 of additional income per acre at current soybean prices.

When we subtract total expenses (\$30) from additional income (\$42), we see a net profit of \$12/acre from using a fungicide application at this site. These are all rough estimates.

### Summary

Fungicide application can be beneficial in soybean production, especially when all three sides of the disease triangle are favorable for disease development.

At the Eason farm – Klingonsmith site, high enough levels of the target spot organism (*Corynespora cassiicola*), coupled with a favorable environment (dense soybean canopy with frequent furrow irrigation) allowed TS disease to take off during the crop's seed development stage. This resulted in the soybean plant dropping sick leaves sooner, ultimately reducing yields in our untreated strips compared to the strips having fungicide protection from the disease.

This test also showed that good spray coverage generally results in better crop protection when using foliar fungicides. The drone pictures document that good coverage was achieved at 20 gpa in this test, allowing plants receiving protection to function longer into the season.\*\*\*



High levels of target spot had developed in the crop canopy by late season.

## 2025 Soybean Disease Control Demonstration - #2Field (Little Covington)

**Volunteer:** Eason (Carlos, Shane, Travis) Farm      **Consultant:** Mike Simmons

**Partnering:** BASF (Andrea Althoff, Kim Mayberry)

**Location:** Greene County – Lorado, AR      **Soil Series:** Hilleman silt loam

**Objective:** Evaluate soybean disease control and yield response to use of foliar fungicide.

### **Production System:**

Conventional tillage was used on the test field (Little Covington), which was in corn in 2024. A bedder roller was used to prepare 60-inch beds. Soybeans (Armor 49-F37) were planted June 3rd, using a 30-inch row spacing. The field had a good plant stand across the test area.

### **Demonstration Set Up & Procedures:**

The demonstration field was marked off using wire flags. The treatments in the test included an untreated check (no flags) and a fungicide (Revytek) treatment (orange flags). These treatments alternated every 36 rows (90 feet) across the field, resulting in 6 replications (paired comparisons). The test was not randomized.

The Revytek treatment (8 oz/acre) went out July 28<sup>th</sup> using a John Deere spray rig (90-foot swath). An application rate of 20 gallons per acre (gpa) was used to ensure good coverage and canopy penetration. An adjuvant (Petrichor at 4 oz/acre) was also included to improve spray coverage. Note that Revytek contains three active ingredients (fluxapyroxad, pyraclostrobin, and mefentrifluconazole), all from different groups of fungicide chemistry (groups 7, 11, & 3).

Mike Simmons, local Crop Consultant, made weekly pre-spray and post spray field observations to check for the presence of foliar disease, and to assess the level of disease pressure.

Andrea Althoff, Field Agronomist with BASF, visits about soybean disease meeting with Shane Eason



Andrea Althoff, BASF Regional Field Agronomist, took test field pictures using a drone a few weeks after fungicide treatment, to compare the crop for differences in plant health and maturity between untreated and treated strips.

Yields were determined for each treatment using the farmers combine yield monitor. Yield maps were also generated with John Deere (JD) mapping software.

**Results & Discussion:**

**Disease Pressure**

The soybeans were at GS R3 (early pod) on July 28<sup>th</sup> when the Revytek treatment went out. At this time, Frogeye leaf spot (FLS) was only found in trace amounts in the upper canopy. We also noted a light level of downy mildew (DM) in the upper canopy. In addition, the weather was hot, and dry which did not favor disease development.

By August 13<sup>th</sup>, 16 days after our fungicide treatment was made, the soybeans were at R4 (early seed), and FLS was still at just trace levels in both treated and untreated plots. DM was also still at a light level in the top of the crop canopy. The weather was still dry and hot, resulting in weekly furrow irrigation.

A month later, on September 17<sup>th</sup>, the soybeans were at full seed (GS R6). Disease pressure was still very light, with just a little FLS seen in the top of canopy, while target spot (TS) was beginning to develop in the lower part of the canopy.

Two weeks later (October 3<sup>rd</sup>) soybean leaves were beginning to yellow, and we could find TS lesions more readily from low to mid canopy. A week later (October 10<sup>th</sup>), drone pictures of the field taken by Andrea Althoff, BASF Field Agronomist, easily show the alternating strips of treated (fungicide) versus untreated plots.



Drone pictures taken by Andrea Althoff, BASF Agronomist



**Yield**

The test field was harvested on October 16th. The adjusted yields recorded are shown in table 2. Averaged across reps, the plots receiving fungicide treatment made 81.5 bushels per acre (bpa) while the untreated plots cut 79 bushels.

Yield maps created by the JD mapping program give a good digital view of the yield differences between treated and untreated strips.

**Economics**

The fungicide application at the Little Covington field, gave a small bump in yield, but resulted in a near breakeven investment when economic returns were considered. Total expense included the cost of a ground application and the fungicide (Revytek – 8 oz). The application and product (2026 UADA budget) were estimated at \$7 and \$23 per acre, respectively, for a total of \$30/acre.

The fungicide application resulted in a 2.5 bushel increase per acre, which computes to around \$26 of additional income per acre at current soybean prices.

When we subtract total expenses (\$30) from additional income (\$26), we see a small net loss of \$4/acre from a fungicide application at this site. Remember these figures are all rough estimates.



**Table 2. 2025 Soybean Fungicide (Revytek - 8 oz/A) Test**  
**Eason Farm - Lorado, Arkansas Shop field - Harvested October 16th**

Plot #	Test	Plot	Plot	Plot	Combine	Combine	Combine	Plot	Adjusted	Test	
N to S	Treatment	Width	Length	Area	Monitor	Monitor	Monitor	Pounds	Yield	Weight	
		Feet	Feet	Acres	Load	Wet	Percent	Adjusted	Bushels	Pounds/	
					Number	Pounds	H2O	H2O 13%	Per Acre	Bushel	
1	T	30	1213	0.84	4	3981	12.4	4008	80.0		
2	U	30	1212	0.83	5	3852	12.5	3874	77.4		
3	T	30	1225	0.84	6	4177	12.6	4196	82.9		
4	U	30	1224	0.84	7	4026	12.5	4049	80.1		
5	T	30	1220	0.84	8	4228	12.7	4243	84.2		
6	U	30	1220	0.84	9	4106	12.6	4125	81.8		
7	T	30	1220	0.84	10	4125	12.8	4134	82.0		
8	U	30	1220	0.84	11	3984	12.6	4002	79.4		
9	T	30	1220	0.84	12	4026	12.5	4049	80.3		
10	U	30	1220	0.84	13	3867	12.6	3885	77.1		
11	T	30	1220	0.84	14	4043	12.7	4057	80.5		
12	U	30	1220	0.84	15	3920	12.4	3947	78.3		
13	T	30	1220	0.84	16	4026	12.4	4054	80.4		
Fld Ave>									4048	80.3	
Trt Ave>									4106	81.5	
Un Trt Ave>									3980	79.0	

### **Summary**

Foliar fungicide use can be beneficial in soybean production but is more likely when conditions are favorable for disease development.

At the Eason Little Covington location, low levels of disease resulted in limited yield response to a fungicide application. We were, however, able to get enough of a yield gain to offset most of the cost of the fungicide application. The strips receiving the fungicide treatment remained green 3-4 days longer than the untreated strips, which could have allowed a little more time for seed fill.

This test also demonstrated that good spray coverage generally results in improved crop protection when using foliar fungicides. Good coverage was achieved at 20 gpa in this test as we seen in the drone pictures taken by BASF.



Carlos Eason (left) chats with Mike Simmons, local crop consultant, about harvest of their soybean fungicide test.

## 2025 Corn Hybrid Demonstration

**Partnering:** Derek & Royce Boling      **Consultant:** Shane Frost  
**Investigator:** Dr. Jason Kelley      **Ext. Agent:** Lance Blythe / Dave Freeze  
**Location:** Paragould      **Soil Series:** Calhoun Silt Loam

**Objective:** Accumulate yield, agronomic, and disease tolerance support data of corn hybrids entered in the U of A System, Division of Agriculture, county performance trials. Determine local yield potential and adaptability of commercially available hybrids.

**Previous Crop:** Soybeans

**Tillage, Planting, & Demo Setup:**

On April 17<sup>th</sup>, conventional seedbeds were planted with 8 rows of each variety, on 30-inch row spacing, and with row length of 1215 feet. Demonstration included 15 hybrids varieties and 1 conventional variety.



Planting Crew

**Crop Development, Weather & Pests:**

2025, like many years, was full of challenges. Seems like flooding followed by droughty periods is becoming the new norm. Moisture at planting was good. Overall, growing conditions were good this year. Rainfall was timely, except for a mild late-summer drought. Overall, pest pressure was light this year. Outlook, Atrazine, and Acuron were applied for weed control, followed by Besiege for insect control.



**Fertility & Irrigation:**

At planting, a 60-30-80 was applied. Sidedress fertilizer (160-0-40) followed around the 5-leaf growth stage. At pretassel, 45-0-0 was applied. Total units of fertilizer for the season were 265-30-120. Furrow irrigation was used on this field.

**Discussion & Results:**

The plots were harvested on September 2<sup>nd</sup>. Yield data was collected using a weigh wagon and a moisture meter. Yields were adjusted to 15.5% moisture (Table 1). Hybrid yields ranged from 256-288 bpa. The one conventional entry yield was 244 bpa.



Part of the harvest crew (LtoR): Danny Graham, Derek Boling, & Lance Blythe.



**Table 1: 2025 Corn Hybrid Demonstration  
Greene County Cooperative Extension Service**

Grower:	Boling Farms	Investigator:	Dr. Jason Kelley
Location:	Bard Area	County Agent:	Lance Blythe & Dave Freeze
Farm Manager:	Royce & Derek	Consultant:	Shane Frost
Planting Date:	4/17/2025	Soil Type:	Tuckerman fine sandy loam
Harvest Date:	9/2/2025	Previous Crop:	Soybeans
Number Rows:	8	Row Length x Width:	1215 ft. x 30 in.

Fertility: (lb/ac)	N	P	K	S	Zn
--- Preplant	60	30	80	0	0
--- Sidedress	160	0	40	0	0
--- Pretassel	45	0	0	0	0
<b>Total Fertility:</b>	<b>265</b>	<b>30</b>	<b>120</b>	<b>0</b>	<b>0</b>

**Pesticides:**  
Acuron  
Atrazine + Outlook  
Besiege

Irrigation Type: Furrow

Number of Times: Multiple

Hybrid	Adj. Yield <sup>1</sup> Bu/Acre	Acres	Weight	Yield	% Moisture	Test Weight	Plant Stand	Lodging Score <sup>2</sup>
Beck's 6973TCV2P	<b>288.4</b>	0.558	9,400	300.8	19.0	56.9	35,000	1
Progeny 2419TRE	<b>286.1</b>	0.558	9,190	294.1	17.8	59.5	34,000	1
Dyna-Gro 58VC74	<b>277.3</b>	0.558	8,810	281.9	16.9	59.7	33,250	1
Progeny 2314TRE	<b>277.2</b>	0.558	8,860	283.5	17.4	59.3	33,000	1
Dekalb 68-35	<b>276.6</b>	0.558	8,735	279.5	16.4	58.8	34,000	1
Dyna-Gro 60TC45	<b>276.2</b>	0.558	8,915	285.3	18.2	57.2	36,000	1
Beck's 6700V2P	<b>274.3</b>	0.558	8,715	278.9	16.9	56.6	34,750	1
Beck's 6492TCV2P	<b>272.5</b>	0.558	8,565	274.1	16.0	60.0	34,500	1
AgriGold 646-17TRC	<b>270.3</b>	0.558	8,485	271.5	15.9	58.7	34,000	1
Dekalb 66-06	<b>269.3</b>	0.558	8,485	271.5	16.2	58.7	33,750	1
AgriGold A647-79 VT2PRO	<b>267.2</b>	0.558	8,470	271.1	16.7	58.7	35,000	1
Pioneer P13777PWUE	<b>266.1</b>	0.558	8,455	270.6	16.9	57.5	35,750	1
AgriGold 642-18SSPRIB	<b>264.9</b>	0.558	8,490	271.7	17.6	57.3	35,250	1
Pioneer P18216PWE	<b>264.2</b>	0.558	8,355	267.4	16.5	57.8	35,000	1
AgriGold A645-30VT2RIB	<b>259.2</b>	0.558	8,225	263.2	16.8	59.5	33,750	1
Beck's 6774Conv	<b>244.0</b>	0.558	7,905	253.0	18.5	58.5	34,500	1
<b>Average</b>	<b>271</b>	<b>0.558</b>	<b>8,629</b>	<b>276.14</b>	<b>17.1</b>	<b>58.4</b>	<b>34,469</b>	<b>1</b>

<sup>1</sup> Yield is adjusted to 15.5% moisture.

<sup>2</sup> Lodging score - 1 is no lodging, 10 is completely lodged.

Special thanks to Dave Freeze, Jeremy Noder, Danny Graham, & Joshua Stidman for assisting with harvest.

Additional thanks to Danny Graham for the weigh wagon.

## 2025 County Corn Hybrid Demonstration Program

### Delta District Yield Summary

	-----Delta District Counties-----					
Hybrid	Ashley	Chicot	Clay-West	Cross	Drew	Greene
	-----Yield Bu/Acre-----					
Dekalb DKC 66-06	266	217	271	226	239	269
Dekalb DKC 68-35	270	226	258	237	236	277
Dyna-Gro 58VC74	250	221	222	226	226	277
Dyna-Gro 60TC45	263	258	267	245	256	276
Pioneer 13777PWUE	243	230	262	228	230	266
Pioneer 18216PWE	262	209	257	222	237	264
Progeny 2314TRE	254	191	261	230	216	277
Progeny 2419TRE	262	258	258	247	255	286
<b>Trial Mean</b>	<b>259</b>	<b>226</b>	<b>257</b>	<b>233</b>	<b>237</b>	<b>274</b>
Row Spacing (in)	38	38	30	30	30	30
Planting Date	March 21	March 21	April 19	April 16	April 14	April 17
Soil Type	Silt Loam	Sandy Loam	Silt Loam	Silt Loam	Silt Loam	Sandy Loam
Irrigation Type	Furrow	Furrow	Furrow	Furrow	Furrow	Furrow

	-----Delta District Counties-----					
Hybrid	Jefferson	Lonoke	Poinsett	White	Woodruff*	Delta Mean
	-----Yield Bu/Acre-----					
Dekalb DKC 66-06	207	262	244	240	199	<b>244</b>
Dekalb DKC 68-35	259	246	258	241	201	<b>251</b>
Dyna-Gro 58VC74	233	249	234	241	166	<b>238</b>
Dyna-Gro 60TC65	269	246	239	251	195	<b>257</b>
Pioneer 13777PWUE	230	229	236	248	---	<b>240</b>
Pioneer 18216PWE	207	235	239	237	---	<b>237</b>
Progeny 2314TRE	203	184	250	245	198	<b>231</b>
Progeny 2419TRE	244	242	258	258	163	<b>257</b>
<b>Trial Mean</b>	<b>232</b>	<b>237</b>	<b>246</b>	<b>245</b>	<b>187</b>	245
Row Spacing (in)	38	30	38	30	30	---
Planting Date	March 28	April 15	April 16	April 18	May 14	<b>April 12</b>
Soil Type	Silt Loam	Silt Loam	Sandy Loam	Silt Loam	Sandy Loam	---
Irrigation Type	Furrow	Furrow	Furrow	Furrow	Furrow	---

\*Woodruff County trial was not included in the district mean due to missing plots.

**All county data and varieties can be viewed here: [2025 County Data.pdf](#)**

## 2025 Hay Contest

**Cooperators:** Greene County Hay Producers  
**Investigators:** Dr. Jonathan Kubesch, Kenny Simon, & Lance Blythe  
**Partners/Sponsors:** Legacy Equipment, GreenPoint Ag, UADA Agriculture Diagnostic Lab

**Objective:** Provide an opportunity for producers to learn about hay quality, understand the factors that influence quality, and to set hay quality production goals based on animal nutrient requirements &/or customer needs.

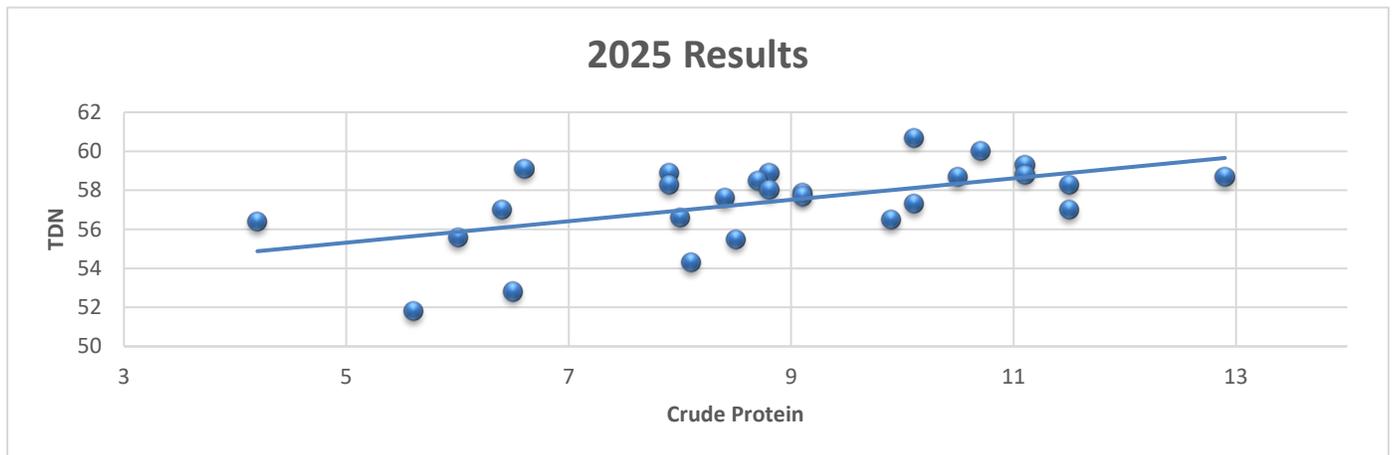
### Testing Method:

Hay samples were pulled on August 12<sup>th</sup> using a Star Quality brand, push-type forage sampler. Twenty to thirty sample cores were pulled from each lot of hay entered. Samples were bagged, labeled, then sent to the UADA Agriculture Diagnostic Lab in Fayetteville. Only warm season grass hay was accepted for the contest.



### Ranking Method & Results:

Samples results were ranked using a composite calculation utilizing crude protein (CP) percent and total digestible nutrients (TDN) percent. The total composite score was weighted 30% for CP and 70% for TDN. See chart below for results.



### 2025 Overview:

2025 was another interesting and challenging year. Factors like large hay stocks being carried over from 2024 and flooding seemed to reduce the amount of fertilizer that was applied early in the growing season, thus reducing yields and quality to some extent. The weather conditions then turned into droughty periods throughout the rest of the growing season. Pest pressure was not “normal” this year either. The Bermudagrass Stem Maggot (BSM) Fly numbers built to treatment levels before Fall Armyworms (FAW) this year. However, FAW did reach treatment levels and were a problem in many fields the remainder of the growing season. The later factors stimulated many producers to try and increase yields for the 2<sup>nd</sup> and 3<sup>rd</sup> cuttings (& a few 4<sup>th</sup> cuttings) to try and fill animal needs and customer requests. Even with all these challenges most producers were able to fill their barns.

**Results & Discussion:**

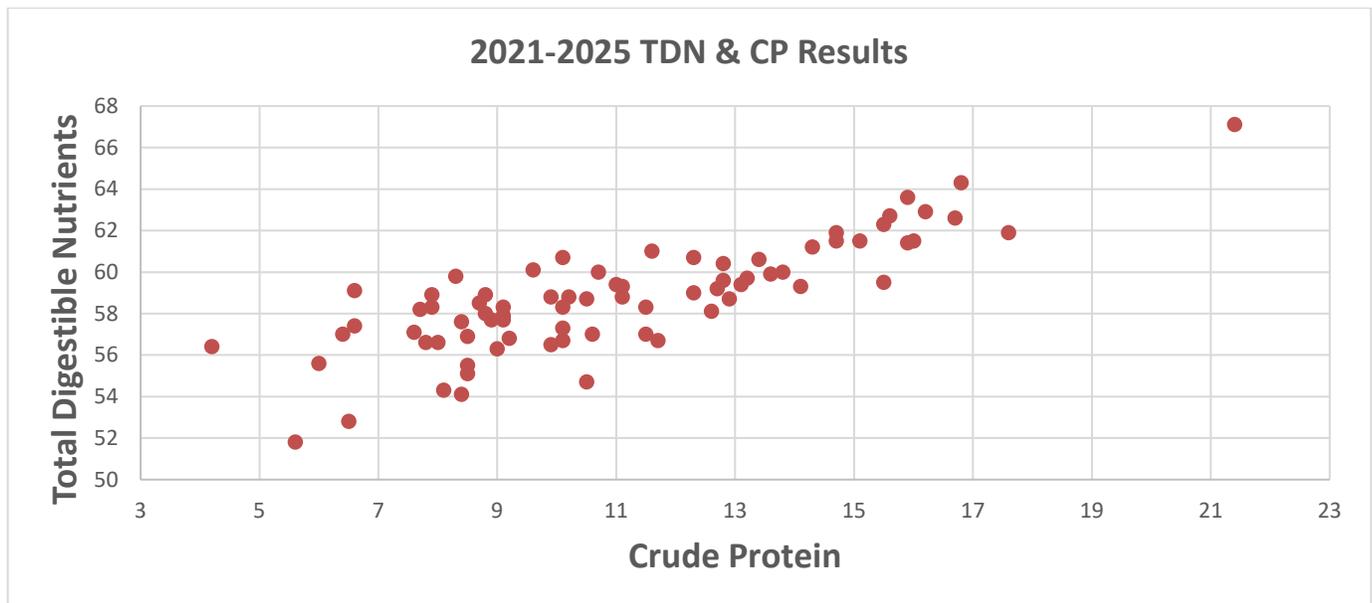
In 2025, like most years, there was a relatively wide variation in test results. Crude Protein ranged from 4.2% - 12.9% and TDN from 51.8% – 60.7%. The variation in nutrient content of these samples was influenced by several factors such as drought, fertilizer rate, conditions at harvest, forage pests, etc. However, no factor influenced the nutrient quality of hay more than the plants’ stage of maturity at harvest.



All samples with TDN over 60% would meet the TDN requirements for a 1,100-pound cow with 18-pound peak milk production at any stage of production throughout the year. With this hay, no supplemental energy should be needed to maintain cow body condition, except for periods of cold wet weather. Additionally, samples over 11.5% CP would meet crude protein requirements in this scenario. The range of results from this year’s samples are a good example of why forage testing is important.

We were pleased that this program continues to keep the conversation going related to the factors that can affect hay production and hay quality. Congratulations to this year’s Top 3 and a special thank you to our sponsors GreenPoint Ag & Legacy Equipment! The sponsors made this contest possible at no cost to producers.

Our fall livestock & forage field day had to be postponed this year. However, we are planning to reschedule the program for early 2026. We plan to discuss the past few years results at that event, see results below.



If you would like to see how your hay meets cattle, sheep/goats, or horse nutritional requirements, check out this link: <https://forageadvisor.uada.edu>

To learn more about how your hay would meet the nutritional needs of cattle at other production stages, check out this publication: <https://www.uaex.uada.edu/publications/pdf/MP391.pdf>

## 2023-2025 Observations & Considerations When Using Rezilon®

**Partnering:** Hill Hay Farms, Gilliam Hay Farms, Speer Farms, Vangilder Farms

**Investigator:** Lance Blythe

**Collaborators:** GreenPoint Ag, Bayer CropScience

**Location:** Multiple locations in Greene County

**Extension Collaborators:** Tommy Butts, Hannah Smith, Kenny Simon, John Boyd

### **Objective:**

The objective of this study was to try and determine what role, if any, a new preemergent herbicide, Rezilon® (indaziflam), may have played in some of the negative effects we were seeing in bermudagrass hay fields in 2021 and 2022 after product application.

### **Background:**

Rezilon® (indaziflam) received EPA approval in July of 2020. Dr. John Boyd, et al., had conducted small and large plot research with the product at two locations in 2017-2018 focusing on preemergent grass control and crop tolerance. Among other findings, they found good control of crabgrass and ryegrass in plots studied and noted the need to use foam markers or GPS guidance to avoid streaks and overapplication.

Several Greene County producers used the product in the fall of 2020 and spring of 2021. We were pleased to see clean fields starting the 2021 growing season. However, we quickly noticed delayed green-up and seemingly weaker/thinner stands in places. Later in the growing season we noticed a few areas (where weeds were killed) that were not “filling in” very well. We thought it may have just been because these areas seem to be lower lying and held more moisture.

In 2022, we saw excellent weed control. However, we also noted the same effects as the 2021 growing season and noticed areas where applications had overlapped and the bermudagrass was very thin. We also noted bare spots that had not “filled in” from the previous year. Later that year we noticed that the stolons were not rooting in these areas. The roots would touch the ground and turn at a 90-degree angle to the soil.

In 2023, again we saw good weed control. However, we also saw some major damage in large areas of bermudagrass fields around the county (several factors likely contributed to this). We decided it was time to try and determine if and to what extent Rezilon may have played in what we were seeing around the county.



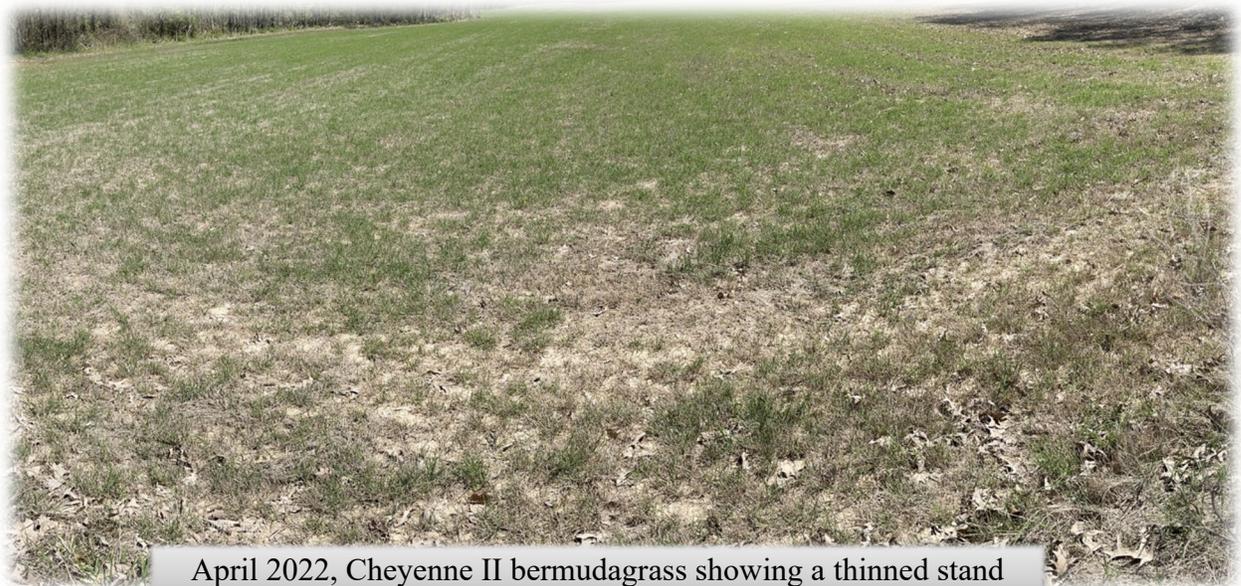
7/3/23: Tifton 44 bermudagrass field showing significant plant damage

**Study #1- Description & Results:**

- In the fall of 2021, we contacted our area Bayer representative and requested some product to conduct some county demonstration work. He was very willing help and sent us some product. We contacted a local producer and started an on-farm demonstration in the spring of 2022.
- In February of 2022, we applied a 3-ounce rate of Rezilon on 2-acres of Cheyenne II bermudagrass using a 12' PTO driven boom sprayer with foam markers. We noted good weed control. However, we also noted thinning stands in lower lying areas of the field and areas where some application overlap had occurred. Additionally, whole-field plant vigor and yield was reduced throughout the 2022 growing season.
- In October of 2022, the producer reluctantly applied 3-ounces of Rezilon to another 2.5 acre field of Cheyenne II bermudagrass. Similar results to 2022 were noted in this field, i.e. good weed control, but the whole field yielded less than the other untreated check field in 2023.
- Producer did let us know that yields seemed to get back to “normal” after a couple of years.



February 2022 Rezilon application field



April 2022, Cheyenne II bermudagrass showing a thinned stand

**Study #2- Materials & Methods:**

In the fall of 2023, we selected four locations with different bermudagrass varieties (Tifton 44, Vaughan's, Midland, Laredo) and different soil types (Hillemann-Lafe complex; Askew silt loam; Patterson fine sandy loam; & Loring silt loam). Each location consisted of 16 (non-replicated) treatments. A CO<sub>2</sub> backpack sprayer with handheld boom, 20" spacing & 110<sup>0</sup> flat fan nozzles, applied 15 gallons of water per acre. Each treatment area was approximately 7' x 40'.

Treatments: Fall Only; Fall & Late Winter/Early Spring; Late Winter/Early Spring only

Application rates: Ranged from 3-12 oz.

- Rate logic: lowest labeled rates, to rates that could occur from overlapping applications.

- Fall only: 3 oz, 5 oz, 6 oz, & 10 oz  
- Applied on 9/14/23
- Fall & Spring: 3 oz + 3 oz, 3 oz + 6 oz, 5 oz + 0, 6 oz + 3 oz, 6 oz + 6 oz, 10 oz + 0  
- Applied on 9/14/23 & 2/7/24
- Spring only: 3 oz, 4 oz, 5 oz, 6 oz, 8 oz, 10 oz  
- Applied on 2/7/24

Laredo bermudagrass treatment field



**Study #2 Results & Discussion:**

**Year 1- In the spring of 2024, the following observations were made:**

- A slight increase in delayed green-up in late-winter/early-spring treatments vs. fall treatments. This was more evident in the seeded variety than hybrids.
- Increased delayed green-up in off-label rates and noted some product movement.
- Noted some dead bermudagrass in areas where water stood.

**Year 2- In the spring of 2025, the following observations were made:**

- Increased areas of bare ground
- Thinning stands (most evident in seeded variety & higher rates)
- Delayed green-up increased in late-winter/early spring treatments vs. fall treatments
  - More evident in seeded variety
  - Noticeable increased delay in off-label rates
- Higher rates showed obvious product movement on sloped ground
- Increase in areas of dead bermudagrass
  - Where water stood, it was always worse (Note: there was over 14" rain in April)
  - Higher rates showed increase in damage

**Crop Tolerance:**

- Tifton 44, Vaughan's, and Midland all seemed to show good product tolerance, except where water stood
- Laredo showed significant damage throughout year 2
  - Study was terminated in the summer of 2025 due to this damage

**Summary:**

Rezilon is an excellent preemergent herbicide that has a place in producer's weed control toolbox. Currently, it may be one of the best labeled preemergent products on the market for controlling glyphosate resistant ryegrass. We found that product application to certain seeded bermudagrass varieties, even at labeled rates, may cause some negative side effects. Negative effects in hybrid varieties were low in year 1, however increased slightly in year 2 (especially at off label rates). If labeled rates are exceeded, negative effects are likely to occur (in both seeded variety and hybrid varieties). These negative effects seem to increase with continued use. This product can move from the applied site to other areas with excess water/rainfall, especially evident on sloped ground and at higher rates. This product has a long residual, and the labeled plant back intervals range from 18-22 months. Anywhere that water stands/pools, negative effects always increase. Over application mistakes with this product will likely result in negative effects. As always, please read & follow label directions!

**Negative effects that were noted throughout study:**

- *Delayed green-up*
- *Weakened & thinner stands*
- *Stolons not rooting*
- *Areas of bare ground*
- *Dead bermudagrass (Rezilon role unclear)*
- *Significant yield reduction and thinning can occur in some seeded varieties*

We were pleased to be able to address a local concern through this study. We learned a lot about how to use and not use this product. Many of these findings were covered in the product label. The one concern that we did see that didn't seem to be addressed on the label was the negative effects on seed-type bermudagrass. We hope that forage producers find this information useful and utilize it when making decisions regarding the use of Rezilon.

We thank everyone that made this study possible!



9/14/23: Laredo bermudagrass study field



4/18/25 Laredo bermudagrass treatment field showing significant damage.



Midland bermudagrass treatment field showing product movement on sloped ground



Laredo bermudagrass treatment field showing product movement across application plots.  
Red arrows are treatment direction. White arrows are product movement direction.

## 2025 High Tunnel Survey

**UADA High Tunnel & Urban AG Instructor:** Taunya Ernst      **Extension Agent:** Dave Freeze

**Growers:** Anderson (Albert, Sharon), Foshee (Andrew), Foster (Brian, Kim), McMillon (Jim, Gloria)

**Location:** Greene County, AR

### **Background:**

As a byproduct of COVID, many families have recently begun growing vegetables. Their goal, to provide a source of available, affordable, wholesome food, for the table.

To provide support (information & resources), the Natural Resources Conservation Service (NRCS) began an Urban Agriculture program to assist families wanting to grow vegetables on a larger scale to provide food for their families and communities.

One component of the NRCS Urban AG effort was to make available high tunnels (HT) to growers wanting to extend their growing season, ultimately improving production. Some individuals awarded HT contracts were novices when it came to vegetable gardening. They were generally also new to growing in tunnels.

Seeing the need for support and training for new HT growers, the NRCS partnered with the University of Arkansas System, Division of Agriculture (UADA), to provide an educational program on growing produce in high tunnels.

### **Objectives:**

- Conduct an early season survey with local producers who have recently started growing vegetables in high tunnels. Goals were to identify challenges faced, as well as successes seen with HT production.
- Record HT pests, their level of development, and their response to control measures, using IPM practices.
- Monitor ventilation status within tunnels as it changed throughout the season, as well as the practices used to manage HT temperature and humidity.
- Assess management practices followed to provide nutrient and water needs for HT crops.



### **Project Setup:**

During the spring, new growers were recruited for the HT survey. An initial visit was made to each grower's tunnel site to assess their setup for drainage and ventilation. Wind and sun status notes were also taken. In addition, soil samples were pulled and sent to the UADA soils lab for testing.

A schedule was set up with growers for monthly monitoring of tunnels. During each monthly visit, an assessment was made of the current ventilation status. Plants were also given visual inspection to determine if nutrient and water needs were being met. Finally, vegetables were checked for damage from insects, diseases, and rodents. Any weed issues were also noted.

Taunya Ernst, High Tunnel & Urban Agriculture Instructor for the UADA, also provided input in the Greene County survey. She helped evaluate the HT sites during our May visit.



Tunnel discussion - Taunya Ernst and Albert Anderson

### **Results and Discussion**

#### **Tunnel Type & Size:**

One tunnel in the survey was set up by the farmer and his family. The kit he used came from Tom Landreath Greenhouses. It was a Quonset style tunnel with a rounded top.

The other 3 survey tunnels were set up by and purchased from Mindful Farmer. They were all gothic style with a roof peak in the center.

All 4 survey tunnels were 20 feet wide and 36 feet long, for a total of 720 square feet. Following is a link of high tunnel suppliers recently compiled by the UADA HT team.

<https://uaex.uada.edu/farm-ranch/crops-commercial-horticulture/horticulture/docs/HT%20Suppliers%20List.pdf>



Gothic style high tunnel

**Drainage Observations:**

One issue many new HT growers face is drainage problems. Water from heavy rains often finds its way into the structures if drainage is not managed. Water intrusion can reduce crop performance and make a muddy mess inside the tunnels.

All the 2025 HT survey sites ended up with fair to good drainage. The survey tunnels were built on generally higher ground (natural, or with soil preparation to provide an elevated tunnel spot).

Drainage furrows had also been adequately prepared along the sides of the tunnels at all the survey sites. They were big enough to handle large volumes of water running off the tunnels, and the surrounding land, during big rains.

One grower even made custom gutters (large poly tubing) to use on his HT to direct runoff water behind the tunnel (low end at site). Another survey grower used raised beds on the back wall of his tunnel to deter water intrusion on the low end of the tunnel.

Preparing a good drainage plan is imperative before tunnel construction begins.



Excellent drainage ditches by high tunnels

**Ventilation Observations:**

In the Midsouth, wide ranges in temperature and humidity call for a well-managed plan for keeping HT plants healthy, and growing at their best, to make top crops.

Side walls for all 4 tunnels in the survey were around 5 feet tall, which seemed to work well for ventilation, and for grower mobility working in the tunnels. All growers were vigilant to manually raise and lower sidewalls during the spring, to trap the days warmth each evening, and to allow radiant heat to escape as temperatures rose each morning. The tunnels all had thermometers, used to help monitor temperature fluctuations throughout the day.



Side walls for tunnel ventilation.

Most of the tunnels in the survey also had large entry doors on each end wall, as well as vents for both ends. With the higher side walls, plus doors and vents in the end walls, humidity in all the survey tunnels was well managed which helped diminish problems that are often seen in tunnels where humidity runs high.

All the growers in the survey put shade cloth over their tunnels as temperatures rose going into May-June. They also took a late summer break from growing, then came back to plant cool season crops in the Fall.

### **Nutrition Observations:**

Soil samples were collected at each of the HT survey sites. They were sent to the UADA soil test laboratory to check for pH and salt status, as well as nutrient levels.

Considering pH, three HT survey sites had pH levels falling in the 6+ range and did not require lime. One tunnel location had a pH of 5.4 and called for a ton of lime per acre. For growers new to HT production, make sure to prepare the soil before building the tunnel. Lime applications can be made and incorporated as needed beforehand.

What about salt levels? All tunnels in the survey were in their first season or two of production, so we did not expect there had been enough time for salts to build up to levels that would slow plant development or hurt production.

EC (electroconductivity) readings (shown as umhos/cm) from HT survey soil test results ranged from 239 to 877. Three tunnels had EC readings under 500, which is considered a low reading, and safe for established plants. One tunnel soil test EC reading was 877, considered a medium reading, and safe for established plants, but high enough to warrant concern and take measures to keep salt levels from building.

As a caution to those planning to get into HT vegetable production, over time, salt levels can build up. Rain is not received in a HT to help flush the salts out of the soil. For this reason, soil samples should be regularly taken to check the salt level in the soil. Also, it is imperative not to over fertilize the crop and bring on a salt situation in a short time.

Considering nitrogen (N) nutrition, soil sample results also provided nitrate levels for each of the tunnel sites. They ranged from 80 to 386 pounds of nitrate N per acre. These were all considered high levels of N, and required us to modify N fertilizer applications accordingly.

The 2 sites that had over 150 pounds of nitrate N were not recommended any N fertilizer for the season. They had high enough residual levels of N (likely due to a good amount of composted gin trash that had been incorporated into the soil in the tunnels) that N fertilizer was not recommended. Remember also, that these high levels of nitrate can lead to higher salt levels later.

We did recommend a low rate of N fertilizer for the 2 sites that had nitrate N readings in the 80 pounds per acre range. Make sure not to over fertilize with N (organic or fertilizer) or it could lead to excessive plant growth (less fruit development) in addition to salt buildup.

We closely evaluated the need for phosphorus (P) and potassium (K) fertilizer based on soil test results. Considering P, 3 out of the 4 survey sites had extremely high levels of soil test P and did not call for any P fertilizer. The other site had an optimum level of soil test P and called for just 40 pounds of P fertilizer per acre.

When we looked at soil test K levels, they were extremely high at all HT survey sites. No K fertilizer was recommended. It is also noteworthy that the 2 sites which used gin trash as an organic amendment to the soil had soil test K levels over 5 times the level needed to trigger a K fertilizer application.

Yearly soil samples in HT production are suggested so a grower can fine tune fertilizer applications to meet the crop's nutrient needs without applying excess fertilizer that can build salt levels in the soil.

We were happy to see one of the survey growers using fertigation to spoon feed his crop through the growing season. Our organic grower in the survey also followed a different nutrient management approach, using rabbit manure as a source for plant nutrition, while avoiding the use of commercial fertilizers.

**Irrigation Observations:**

Irrigation requirements varied at each survey site. One grower in his second year of production used drip irrigation every 3 to 4 days. This approach allowed him to meet the water needs of the crop and still yet keep the alleys between rows dry, making it easier to work in the tunnel.

Another grower in the survey had a very high level for the water table at his site, making irrigation not needed nearly as often, especially during times of normal rainfall. He hand watered as needed.

The other 2 growers also hand watered as needed. One used tubs, allowing the water in the tubs time to warm up before using it to irrigate his vegetables.

New tunnel growers are encouraged to set up drip irrigation. It allows a producer to calculate to the gallon how much water the crop is receiving. It also works great to spoon feed your vegetables by injecting the fertilizer in the irrigation water.

**Pest Observations:**

Some of the pest insects seen in the tunnel survey were aphids, squash bugs, flea beetles, and slugs. The growers sprayed as needed.

Diseases found this year in the HT survey included early blight and septoria leaf spot, both found on some tomatoes at a couple of the sites. Fungicides were sprayed as needed. With the good ventilation seen this year at all the HT sites, disease pressure was very



Fertigation set up in Jim McMillon's high tunnel.



Drip irrigation being used in high tunnel.



Early blight lesion on high tunnel tomato.

One of our HT survey growers was an organic gardener. He used an organic approach to manage pests, including foregoing the use of synthetic pesticides.

As a final precaution, remember in a tunnel environment, protective conditions that allow plants to grow well also allow insects to thrive and for populations to explode quickly. With warmer temperatures and no beating rainfall, insect levels can develop at a rapid pace, so scout for pests regularly in your high tunnels.

Rodent activity noted by our HT survey growers included rabbits and pets. One producer had a family of rabbits living in his tunnel while another grower battled to keep his dogs out of his tunnel. Preventative barriers need to be established as needed for rodents with HT production.

Regarding weeds, all the growers in the survey used some form of mechanical tillage to start with a clean seedbed at planting time.

One grower saw a bit lower production due to weed pressure from wheat. He used wheat straw as a mulch after planting cool season crops which worked well to shade the soil and suppress weed seed from emerging. Wheat seed in the straw came up to a dense stand which later in the season caused some competition, slowing vegetable development, especially for the summer crops.

One tunnel grower used a weed fabric barrier in his 2 rows of tomatoes, that was very effective. Hand weeding was used in all the tunnels to keep vegetable rows clean.

### **Summary:**

Using high tunnels to extend the growing season can be a great way to improve vegetable production. It is also a way to start early in the spring and go late in the fall and even early winter, to grow crops.

To be successful with tunnels generally requires a lot of site planning and prep before building the tunnels. Once tunnels are up, and crops planted, daily management will be needed to monitor tunnel ventilation and water status. Pest pressure will also need assessed multiple times per week and action taken accordingly.

Make sure to visit your local NRCS rep and/or County Agent for suggestions on HT production. Visit the UADA HT website at this link for more information.  
<https://uaex.uada.edu/farm-ranch/crops-commercial-horticulture/horticulture/high-tunnel-production.aspx>



Squash bug laying eggs on squash plant in high tunnel.



Lance Blythe and Taunya Ernst make tunnel plans for 2026.

**Thanks to our 2025 Tunnel Survey Growers!**



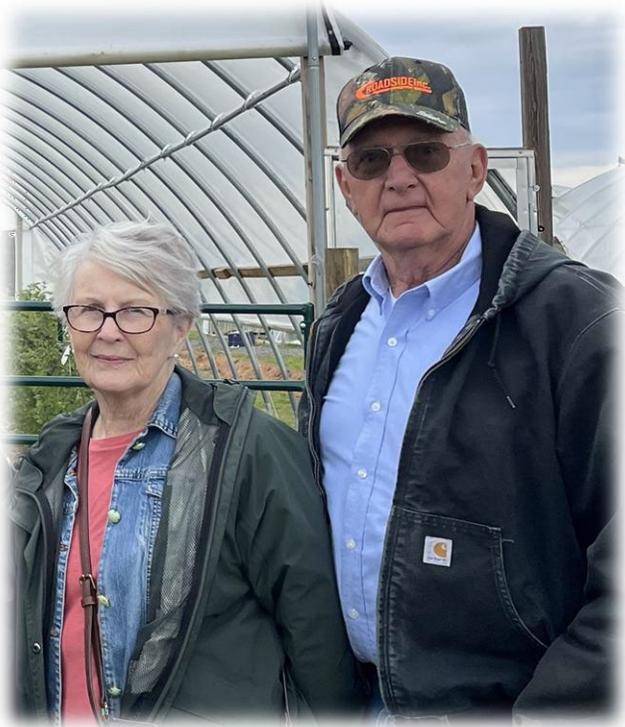
Anderson Farm (Albert, Sharon)



Foshee Farm (Andrew).



Thanks to Trevor Grubb, local NRCS Soil Conservationist. He assisted the Greene County Extension Service in helping HT growers as needed.



McMillon Farm (Jim & Gloria)



Foster Farm (Brian, Kim)



## *Greene County Master Gardener 2025 Officers*

**President:**

Kathy Graber



**Vice President:**

Colin Hester



**Secretary:**

Sue Gilmartin



**Treasurer:**

Pauletta Tobey



**Member At Large:**

Patti Roberts



**Member At Large:**

Alyssa Blakeney



A BIG Thank You to all these individuals for dedicating many hours of their time, talent, and experience to guide the local Master Gardener Program 😊

# *Greene County Master Gardener 2025 Award Winners*

## *Master Gardener of the Year:*

Colin Hester



## *Rookie of the Year:*

Terry McCulley



**Mentor of the Year:**

Susan Youngblood



**Project of the Year:**

Lake Frierson Monarch Waystation  
GCMG Project Chair: Brenda Hester  
Project Partner Contact: Katherine Combs



**Business Friend of Master Gardener:**

Tractor Supply Co. (TSC)

Manager: Emily Hendren



**Individual Friend of Master Gardener:**

Kitty Sloan



Congratulations to our 2025 Greene County Master Gardener Award Winners! Good luck in the state competition 😊

## Expanded Food and Nutrition Education Program

The Expanded Food and Nutrition Education Program (EFNEP) in Greene County, Arkansas aims to improve the health and well-being of limited resource families and youth by providing nutrition education, physical activity guidance, and food resource management strategies.

**Program Activities and Outreach:** During this reporting period, EFNEP in Greene County implemented the following curriculums: Adults – Eating Smart Being Active; Youth- Teen Cuisine and Kids in the Kitchen. Through educational sessions efforts were made to promote healthier lifestyles in a variety of strategies.



Hot appliance skills being practiced with making pancakes

**Collaborations and Partnerships:** The Way, Agape House, Greene County Tech Elementary, Greene County Tech Jr. High, Greene County Tech Alternative School, Crowley’s Ridge Christian Homeschool Co-Op, Greene County 4-H Food Challenge Group, Greene County Tech Summer Day Camp



Kids in the Kitchen at Greene County Tech Summer Day Camp



Knife skills being taught while making salsa at Paragould High School

**Program Impact:** Through the efforts of EFNEP in Greene County, success was measured in areas of participant knowledge and behaviors. The program strives to achieve key outcomes such as:

- Encouraging increased consumption of fruits and vegetables.
- Promoting improved meal planning and budgeting skills.
- Supporting higher levels of physical activity among families.
- Fostering enhanced food safety practices at home.

These goals reflect EFNEP’s commitment to helping participants make healthier choices.



Hands on learning while making cookies



Teen Cuisine at Greene County Tech Jr. High

## 2025 Top Notch Intercollegiate Swine Judging Contest

**Cooperating:** Greene County Agriculture Instructors, FFA members, Greene County Fair Association, Greene County 4-H Foundation, Greene County Farm Bureau, Instructors of the Division of Agriculture of the University of Arkansas, Greene County 4-H Livestock Project Club members, parents & volunteers, twelve colleges from surrounding states participating in livestock judging.

**Lead Agent:** Kristie Head

**Objective:** The objective of the judging contest is to provide an educational swine judging experience that promotes growth in livestock industry knowledge, improves livestock evaluation skills, and strengthens competitive judging abilities such as animal selection and oral reasoning. This event will also give 4-H youth the opportunity to observe a collegiate-level swine judging contest, encouraging the development of leadership, communication, decision-making, note-taking, public speaking, and teamwork skills. Additionally, the contest will offer hands-on opportunities for 4-H members to plan, conduct, and manage an event for a large and diverse audience.



4-H members driving hogs for the contest.



2025 Top Notch Intercollegiate Swine Judging Contest group photo.



Keeping hogs cooled and watered during the contest.



Registering colleges for the contest.



College student giving oral reasons.

**Educational Method:** The contest consisted of eight evaluation classes for collegiate teams, four of which required participants to deliver oral reasons to professionally qualified evaluators within the livestock industry. Greene County 4-H members observed and assisted with contest operations, while 4-H members, parents, and volunteers assumed specific management responsibilities, actively engaging in the 4-H principle of “learning by doing.” Following the contest, both collegiate participants and 4-H youth received additional instruction as a livestock professional conducted evaluation and oral reasoning demonstrations for each class.



Greene County 4-H members presenting awards.



Greene County Farm Bureau provided lunch for contestants and volunteers.



Arkansas 4-H, GCT FFA & Greene County working together.



4-H members keeping hogs rinsed and cool.



College contestants waiting to give oral reasons.

**Results:** A total of **12 collegiate livestock judging teams**, representing multiple states, participated in the **fourth annual contest**, with **163 contestants** competing. The event was held at the **Greene County Fairgrounds** and the **Greene County Extension Office**. Greene County 4-H youth were immersed in a wide range of operational responsibilities, including rinsing and watering animals, driving hogs, managing the staging area, preparing the awards area, and assisting with meal service. Through these hands-on roles, youth gained practical experience in event management, decision making, teamwork, and livestock care. Participation in this event contributed to measurable growth in several skill areas for 4-H youth. Members demonstrated increased confidence in handling livestock, improved communication and leadership abilities, and enhanced problem-solving and decision-making skills while managing a fast-paced contest environment. Additionally, exposure to collegiate-level competition heightened their understanding of livestock evaluation and expanded their awareness of future educational and career opportunities within agriculture.



Staging area where 4-H members, volunteers, and parents prepare animals for the contest.



2025 Top Notch Intercollegiate Swine Judging Contest Awards Ceremony held at the Greene County Extension Office.

## 2025 Greene County 4-H Participation in O’Ramas

**County 4-H O’Rama:** County 4-H O’Rama is designed to showcase the knowledge, skills, and personal growth that 4-H youth develop through their projects and club work. It serves as the first level of competition in the Arkansas 4-H O’Rama system and provides meaningful opportunities for youth to learn, lead, and succeed.



Greene County 4-H winning members of Indoor O’Rama contests

**District 4-H O’Rama:** The Delta District 4-H O’Rama provides youth with the opportunity to advance their skill by competing against a broader pool of participants which strengthens their independence public speaking and presentation skills. The District O’Rama competition builds upon the learning and experience gained at County Orama, and serves as the qualifying step for the Arkansas State O’Rama.



Greene County 4-H members competed at the District O’Rama in Forrest City, AR.

**Arkansas State O’Rama:**

The 4-H State O’Rama is the highest level of competition and recognition for Arkansas 4-H youth ages 14–19. Its purpose is to celebrate excellence, develop leadership, and showcase the advanced skills that members have gained through years of project work, service, and citizenship. Greene County had 5 4-H members compete at the Arkansas 4-H State O’Rama, and a Governor’s Award Finalist.



Greene County 4-H representing at the 2025 Arkansas 4-H State O’Rama



Performing Arts



FCS Presentation



Ornamental Horticulture

## Greene County 4-H Service Learning

**Purpose:** The purpose of service learning is to help youth develop leadership, responsibility, and citizenship by addressing real community needs through meaningful service. Service learning connects hands-on service with reflection and education, allowing youth to understand how their actions make a positive impact. 4-H members build life skills, strengthen community partnerships, and learn the importance of giving back while developing empathy and civic engagement.



Christmas Live Nativity



Serving at Farm Bureau Banquet



Placing flags at Memorial Gardens for Memorial Day



2025 Farm Mudder



Clean Sweep  
Paragould

## Greene County 4-H Project Groups

**Purpose:** The purpose of 4-H Project Groups is to provide youth with opportunities to explore specific interests, develop new skills, and gain knowledge through hands-on, project-based learning.

**Details:** Project Groups in Greene County include: Fishing, Gardening & Horticulture, Homestead, Horse & Pony, Photography, Rabbit, Sewing and Wildlife & Natural Resources.



Gardening &  
Horticulture



Sewing Group meeting



Fishing Group volunteering  
at Cast for Kids Event

### 2025 Food Plot

**Purpose:** The 4-H Food Plot Project provides an opportunity for Arkansas Junior and Senior 4-H members to demonstrate their skills with preparing, establishing, maintaining, and observing a small wildlife food plot using provided seed for the purpose of food and cover establishment for wildlife. This project applies STEM through hands-on activities. This Food Plot project is intended to introduce youth to ecology concepts and habitat practices for wildlife. For the 4-H Wildlife Food Plot project, participants submit written, photo, and video evidence demonstrating knowledge gained and field activities.

4-H member preparing to  
fertilize his plot.



4-H member videoing for  
the Food Plot Project.

## **2025 Foods and Nutrition Project Group**

**Purpose:** The Foods and Nutrition 4-H Club design is to help youth develop lifelong healthy habits by learning practical skills in cooking, meal planning, food safety, and nutrition. Through hands-on activities and real-world experiences, members gain the knowledge and confidence needed to make positive food choices for themselves, their families, and their future. Learning experiences center on nutrition, menu planning, food prep and safety.



2025 Dairy Recipe Contest



Food Challenge practice



Serving at the Cattleman's Meeting



Greene County 4-H Food Challenge team members



Prepping breakfast for the Greene County Road Department following days of flooding in the county.



**Key Partners:** Greene County Farm Bureau, Greene County Cattleman 's Association

**Youth Served:** 30

**Lead Agent:** Kristie Head

**Role of Agent:** The 4-H Agent oversees planning and curriculum for the group. Training teams in cooking skills, nutrition, budgeting, presentation while fostering teamwork and healthy living practices. The Foods & Nutrition group participated in four volunteer service-learning projects this year.

**County Level Competition:** Dairy Recipe, Rice is Nice, BBQ Broiler, Beef Cooking

**District and State Level Competition:** Food Challenge and Campfire Cooking: The Food Challenge Competition is a district and state level competition. Greene County hosted the district level competition in 2025 and had 4 teams compete. The members of the Food Challenge teams completed the Teen Cuisine curriculum through EFNEP.



"Sassy Spatulas" Food Challenge team



2025 Food Challenge State Competition best outfit winners, Greene County "Scooby Stew Crew"



2025 Food Challenge District Competition at Greene County Extension

## Greene County 4-H Teen Leaders Project Club

**Purpose:** The purpose of Teen Leaders in 4-H is to provide older youth with opportunities to develop leadership, responsibility, and service skills while mentoring younger members. Teen Leaders take on meaningful roles in planning and leading activities, community service projects, and educational programs. Through these experiences, they build confidence, teamwork, and communication skills, while serving as positive role models and contributing to the growth and success of their 4-H clubs and communities.



Greene County 4-Hers in Washington D.C.



Washington Leadership Conference



Laying out wreaths for Veterans

## 2025 Greene County 4-H Livestock Project Club

**Purpose:** The purpose of the Greene County 4-H Livestock Project Club is to teach skills in the areas of animal stewardship, record keeping, communication, leadership, time management, money management, problem solving, livestock evaluation, responsibility, work ethic and showmanship.

**Key partners:** Greene County Fair Board, Greene County Community Fund, Greene County Farm Bureau, Farm Credit Midsouth, First National Bank, 4-H Livestock families, numerous financial supporters

**Number of Youth Served:** 32

**Lead Agent:** Kristie Head

**Role of Agent:** Teaching youth fundamental livestock care, animal stewardship, health and showmanship skills by offering “hands-on” learning opportunities by planning and conducting clinics, contests, and project meetings. Teaching 4-Hers how to set goals, manage time, money and resources while integrating responsibility, work ethic and problem solving. Connecting youth and parents with breeders and creating opportunities that promote confidence and leadership through project work and presentations. Creating a positive, organized and educational club while serving alongside volunteers and parents. Communicating to families information concerning contest and show dates, deadlines and rules. Encouraging and modeling good sportsmanship, ethical management and professionalism.



2025 Arkansas State Fair  
Market Goat class

**Livestock Show Events:** Greene County Fair, NEA District Fair, Arkansas Youth Expo, Arkansas State Fair, Buffalo Island Northeast District Jr. Livestock Show, Crowley’s Ridge Classic Jr. Livestock Show, North American International Livestock Expo, National Western Stock Show, Mississippi Youth Expo, numerous jackpot shows, numerous breed shows and events. Over 30 youth exhibited cattle, sheep, goats, swine, broilers and rabbits.



Left to Right – Arkansas Youth Expo Berkshire Division Winner, Crowley’s Ridge Classic Grand Champion Meat Pen, Delta Fair Supreme Champion, Greene County Fair Reserve Champion



Arkansas Youth Expo  
 Grand Champion Market Hog



Arkansas Youth Expo  
 Reserve Champion Market Hog

**Livestock Participation:** Livestock Judging, Livestock Skillathon, Beef Quiz Bowl, Livestock Shows

**Livestock Show Events:** Greene County Fair, NEA District Fair, Arkansas Youth Expo, Arkansas State Fair, Buffalo Island Northeast District Jr. Livestock Show, Crowley’s Ridge Classic Jr. Livestock Show, North American International Livestock Expo, National Western Stock Show, Mississippi Youth Expo, numerous jackpot shows, numerous breed shows and events. Over 30 youth exhibited cattle, sheep, goats, swine, broilers and rabbits.



Livestock judging practice



Arkansas Youth Expo



Arkansas State Fair



Arkansas State Fair First Reserve Rabbit



Arkansas State Fair Grand and Reserve  
Champion Meat Pen



Greene County 4-H Livestock Club Awards Banquet



4-H Service-Learning  
project fundraised  
donation for charity



Beef Quiz Bowl team



Arkansas State Fair



Livestock judging practice



Buffalo Island Jr. Livestock Show



Greene County 4-H Livestock Judging team members

## 2025 Shooting Sports BB Team

**Purpose:** The goals of the 4-H BB Shooting program are to build self-confidence, discipline, responsibility, and sportsmanship while promoting safe, fun participation. The program provides youth with proper firearm safety training, conservation education, and an appreciation of natural resources through skilled volunteer instruction.



Prone position  
practice



2025 Greene County 4-H BB  
participants



BB team at Daisy  
Nationals Contest

## Cloverbud Group

**Purpose:** The purpose of Cloverbuds in 4-H is to introduce children ages 5–7 to the 4-H program in a fun, safe, and non-competitive environment. The program helps young children explore new ideas, develop positive relationships, and gain confidence, laying a strong foundation for continued growth and participation in 4-H. they get older.



Assistance with knife  
skills



Building flower boxes for  
residents in retirement



Age-appropriate games and  
fun!

## Greene County 4-H Camp:

**Youth Served:** 60

**Key Partners:** Farm Bureau, Unico Bank, Hiland Dairy

**Purpose:** The purpose of 4-H County Camp was to provide a safe, educational environment that promoted positive youth development through hands-on learning. Using the Arkansas Dairy and Rice theme supported by Farm Bureau curriculum, youth learned about Arkansas agriculture and its importance. Participants rotated through learning stations including cooking, quiz bowl, painting, woodworking, pottery, sports, swimming, and lessons on Arkansas ducks. Campfire activities encouraged teamwork, leadership, and friendships while reinforcing life skills and agricultural awareness.

**Details:** Greene County 4-H overnight camp was held at Mt. Zion Baptist Church Camp in Walcott, AR. There were 20 + leaders and members from the community volunteering to lead, assist and teach during the twenty-four-hour camp. 4-Hers oversaw all meal prep and clean up. Each group/team consisted of a diverse age range from 5 to 18 years of age. Many activities teens were paired with Cloverbuds.



Meal prep in the kitchen, hands-on projects, Teen Leaders in action, and learning about Arkansas rice - All part of the fun and education at Greene County 4- H Camp!



Singing songs around the campfire.



Greene County 4-H Camp group photo.



**DIVISION OF AGRICULTURE  
RESEARCH & EXTENSION**

*University of Arkansas System*

# **2025 Greene County Extension Laboratory Trends**

**7,330 soil samples were submitted to the UofA Soils Lab for analysis from Greene County during the 2025 program year\***



**Total of 45,180 acres were represented by samples**

**\*as of October 1, 2024- September 30, 2025**

**Other specimens analyzed regularly for Greene County:**

- Feed & Forage
- Pests
- Plants
- Litter & Manure



# Your Greene County

## Cooperative Extension Service

www.uaex.uada.edu/counties/greene

# UofA

DIVISION OF AGRICULTURE  
RESEARCH & EXTENSION

University of Arkansas System

## Annual Update

### 2025 Greene County Extension Education Outreach

- Total Educational Contacts: 13,937
- Total County Volunteer Hours: 4,128
- Value of Volunteer Efforts: \$120,083

#### Greene County 4-H Program

##### *Overview of Programs*

- 244 4-H Members
- 40 4-H Volunteers
- 17 4-H Clubs/ Project Groups
- Total Educational Contacts: 4048

#### **Key Programs & Activities Conducted:**

##### **County Events:**

- 4-H Kick-Off Night, 4-H County Day Camp, Fall Farm Mudder, Christmas Community Service Activity, Poultry BBQ Contest, Beef Cooking Contest, Dairy Recipe Contest, Rice is Nice Cooking Contest, Ross Photography Contest, Citizenship Community Service Project at Memorial Gardens, Youth Teaching Garden Educational Sessions, 4-H Craft Night, Fair Entry Prep Night, Farm Mudder, 4-H Farmer's Market, Food Challenge, BB Competition, and 4-H O' Rama Competitions
- Intercollegiate Swine Judging Contest with 163 contestants from 12 different colleges representing nine different states. Over 50 4-H youth and volunteers were involved in planning, hosting, serving, and conducting the event.

##### **Leadership & Achievements:**

- 1 Governors Award Finalist
- 1 Advanced Record Book Winner
- 4 youth received district record book awards

#### Community Economic Development

##### *Key Programs & Activities Conducted/Supported*

- Leadership Paragould
- Paragould Farmers Market
- Community beautification projects

#### Expanded Foods and Nutrition Education Program (EFNEP)

- 227 Youth Participants Graduated
- 52 Adult Participants Graduated



## Agriculture & Natural Resources

### *Overview of Program*

- Educational Contacts: 5,223
- 100's Farm/Site Visits
- 14 Demonstrations



### *Key Programs & Activities Conducted/ Supported*

#### **Corn:**

- Hybrid trial
- Poultry litter rate study
- IPM survey (5)
- SW corn borer moth trap monitoring (9)
- Earworm moth trap monitoring (7)

#### **Forages & Livestock:**

- 11- Livestock & Forage Newsletters & Extension Updates
- Forage IPM Survey & Scouting Reports (multiple farms; weekly reports May-August)
- Forage Production Education Programs & Services
- Hay quality contest
- Spring & Fall Brucellosis Calhooed Vaccinations & Breeding Soundness Exams
- Weed Control Demonstrations- 4 farms
- Nitrogen Rate Study in Irrigated Bermuda (year 2)
- Preemergent Herbicide Rate Study- 4 Farms
- Cow Herd Improvement Programs- Multiple Farms
- Pesticide Applicator Training (3)

#### **Horticulture:**

- High tunnel survey (4)
- Plant trial

#### **Rice:**

- Cultivar trial & field day
- IPM survey (5)
- Herbicide resistance screening (15)

#### **Soybean:**

- Foliar disease control tests (2)
- IPM survey (5)
- Yield contest (3)
- Technology & crop meetings (2)
- Row crop newsletters (8)



## Program Partners

*We want to thank the many businesses & individuals who contributed to our 2025 Greene County Extension projects. Many are listed below:*

### ***Farmers:***

Derek & Royce Boling, Ryan Boozer, Children's Homes Inc., Johnny Distretti, Carlos & Shane Eason, Keith & Tyler Fielder, Jerry Gilliam, Ronnie, Steven & Cruz Hill, Gary & Greg & Larry & Shannon King, John Lane, Tyler & Raney Nutt, Ashton & Clint & David & Eric & Ron Pigue, Chris & Allen & Randy Russom, Terry & Clay Smith, Greg Spaunhorst, Stacey Speer, Andy Vangilder, Dean Wall

### ***Consultants:***

Sterling Clifton, Jack Cox, Brandon Davis, Dustin Engler, Shane Frost, Chris Murray, Mike Simmons, Luke Zitzelberger

### ***Business Supporters:***

AgriGold, Agoro Carbon Alliance, BASF, Beck's Seed, C & H Insurance, Craighead Electric Cooperative Corporation, Dekalb Seed, Delaplaine Seed Company, DynaGro Seed, Farm Bureau, Farm Credit Mid-America, Farm Services Inc., First National Bank, Focus Bank, GreenPoint AG, Hiland Dairy, Hog Air Aviation, Horizon AG LLC., Lawrence County Seed Company, Legacy Equipment, MFA Agri Services, Nutrien Ag Solutions, Oak Grove Feed, Pillow's Fish Farm, Pioneer Seed, Progeny Seed, Riceland Foods, Inc., Rantizo, Ridge Retreat & Adventure Center, Simmons Bank, Sugar Creek Ranch, Syngenta, Three Rivers Aviation, Tim Wells Excavation, Unico Bank, Rice Stewardship Partnership, Corteva AgriScience, RiceTec, Vayda, BW-Fusion, Aquarius Farm Controls, Anheuser-Busch, FABCO Machine Corporation

### ***Community Supporters:***

Agape House, Campground Church, City of Paragould, Crowley's Ridge Christian Homeschool Co-Op, Farm Bureau Women's Committee, Greene County 4-H Foundation, Greene County Cattlemen's Association, Greene County Conservation District, Greene County Fair Association, Greene County Farm Bureau Board, Greene County Tech School District, Greene County Quorum Court, Harvest Baptist Church, Paragould City Council, Paragould Parks & Recreation, Paragould Regional Chamber of Commerce, Paragould School District, The Way Ministries, USDA Natural Resources Conservation Service

### ***University Staff:***

Dr. John Boyd (retired), Dr. Mike Daniels, Dr. Jason Davis, Chris Elkins, Taunya Ernst, Dr. Bronc Finch, Dr. Shane Gadberry, Dr. Jarrod Hardke, Allison Harmon, Dr. Teresa Henson, J.J. Jones, Dr. Maggie Justice, Dr. Jason Kelley, Dr. Jonathan Kubesch, Dr. Amanda McWhirt, Dr. Jason Norsworthy, Stewart Runsick, Dr. Jeremy Ross, Dr. Bob Scott, Kenny Simon, Ples Spradley, Scott Stiles, Dr. Glenn Studebaker, Pia Woods, UADA Animal Science Department, UADA Diagnostics Lab- Cheri Villines

### ***Individual Supporters:***

Josh Agee, Bryce Anderson, Ron Bellomy, Justin Burlison, Micah Brinkley, Fran Cavanaugh, Robyn Chlapecka, Steve Copeland-DVM, Cossey Family Farm, Gary Cupp, Allen Davis, Blake Davis, Jeff Dickens, Adam Eades, Derek & Lisa Exum, Rudy Garner, Jimmy Gazaway, Danny Graham, Brad Gray, Cody & Hannah Gray, Terry Gray, Allen & Tenna Griffin, Chris Harden, Rodney & Kristie Head, Tiffany Hinson, Blake Johnson, James Kashak, Dr. Donald "Bud" Kennedy, Jordan Leatherman, Patrick Lenderman, Chuck Long, Tony Lucius, Mike Magill, Justin Blackburn, Kim Mayberry-Holifield, Jonathan Mays, Daniel Mayer, Jeremy McClelland, Rusty McMillon, Gary Money, Jeremy Noder, Paula Norman, Blaine & Vicki Nunn, Pillow Homestead, Bill Pollard, Adam Rawls, Casey Rogers, Emily Sisco, Jon & Shannon Smith, Mindy Tritch, Daniel Vaughn, Caleb Wall, Scott Watson, Tim Wells, Lance Winn, Jeremy Wooldridge, Richard Yeazel

# Contact us:

**Greene County Extension Service**

**4410 Fairview Road**

**Paragould AR 72450**



**Phone: 870-236-6921**



**[https://www.uaex.uada.edu/  
counties/greene](https://www.uaex.uada.edu/counties/greene)**

**f Find us on  
Facebook**

**[https://www.facebook.com/  
greenecoextension/](https://www.facebook.com/greenecoextension/)**

Pursuant to 7 CFR § 15.3, the University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services (including employment) without regard to race, color, sex, national origin, religion, age, disability, marital or veteran status, genetic information, sexual preference, pregnancy or any other legally protected status, and is an equal opportunity institution.